



University of **HUDDERSFIELD**

University of Huddersfield Repository

Garside, Joanne

Developing Skills and Competence in Acute Care – A case study of an ‘Acute Illness’ Course, 2006-2009

Original Citation

Garside, Joanne (2010) Developing Skills and Competence in Acute Care – A case study of an ‘Acute Illness’ Course, 2006-2009. Doctoral thesis, University of Huddersfield.

This version is available at <http://eprints.hud.ac.uk/id/eprint/9699/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

Developing Skills and Competence in Acute Care – A case study of an 'Acute
Illness' Course, 2006-2009

Joanne Rachael Garside

A thesis submitted to the University of Huddersfield in partial fulfilment of the
requirements for the degree of Doctorate of Education

October 2010

Abstract

Within secondary care hospital settings, acutely ill patients are exposed to the unnecessary risk of the adverse consequences and increased mortality that arise from suboptimal care. A causative factor of suboptimal care is the level of competence of practitioners caring for the acutely ill patient in their failure predominantly, to monitor, recognise or respond appropriately to the deteriorating patient. In partnership with local healthcare organisations, the acute illness course, on which this study was based, was conceived and implemented. The aim of the course was to provide an academic and clinical experience that focused on the development of skills and competence of post-registration practitioners within non-critical care settings. The first cohort commenced their course in 2006. This study investigated the development of this experience, focussing on students' skills and competence following their exposure to a variety of teaching, learning and assessment strategies that had been employed. Competence is one of the most commonly used words in healthcare education yet it is a nebulous concept that is defined in diverse ways by different people. The concept of competence provided the theoretical framework that was analysed and applied within the field of acute care. An educational evaluation using a case study approach was used employing interviews for data collection purposes. The case study examined the many variables of interest within the student experience while maintaining a continuous interaction and dialogue between the theoretical and conceptual dimensions that were being studied. This inquiry opened by interviewing former students of the acute illness course. The aspects that were explored included, students' characteristics, motivations and perceptions of the teaching, learning and assessment methods they had encountered. Of particular interest was the influence of these on the students' development in clinical practice. Triangulation was adopted through interview data derived from both the former students and their managers. The study critically analysed the principle dynamics that influenced students learning in academic and practice settings. The findings demonstrated the intricate synergies that comprised this exercise in professional development. Motivation, emotional responses and performance were often influenced by the experience. The eclectic mix of learning methods that were used were thought beneficial by the study participants, who found that both the theoretical and the clinically related content of the course to be entirely relevant to their clinical practice. The study established that choice, facilitation and feedback through mixed learning and assessment methods leads to confidence and empowerment that positively influence registered nurses' competence in clinical practice. It concluded that in this case, practitioners' continuing professional development was influenced by interlocking concepts that supported the acquisition and maintenance of both their confidence and competence and as a consequence, stood to improve the care of acutely ill patients.

Contents

Abstract	2
Contents	3
Acknowledgments	10
Glossary	11
 Chapter 1. Introduction and Context	 13
1.1 Background to the study	13
1.2 The acute illness course	15
1.2.1 Assessment care and management of an acutely ill patient	16
1.2.2 The professional principles underpinning clinical practice	17
1.3 The educational context	18
1.4 The educator and practitioner as a researcher	19
1.5 Summary	20
 Chapter 2. Care and Management of the Acutely Ill Patients in Hospital: A Review of the Literature	 22
2.1 Introduction	22
2.2 Evidence and research based practice	22
2.3 The literature search	23
2.3.1 Search engines	24
2.3.2 Search terms	24
2.3.3 Inclusion/exclusion criteria	24
2.4 The literature review findings	25
2.4.1 Standard of care for the acutely ill patient in hospital	26
2.4.2 Failure-to-rescue	27
2.4.3 The physiology of clinical shock	28
2.4.4 Antecedents of clinical deterioration in the acutely ill patient	29
2.4.5 Elements of suboptimal care	30
2.4.6 The prevalence of suboptimal care	31
2.4.7 Suboptimal care variables	33
2.4.7.1 Communication failure	33
2.4.7.2 'Do not resuscitate' orders	34
2.4.7.3 The multi-professional team	34
2.4.7.4 Registered nurse skill mix and educational levels	35
2.4.8 Education and training needs	39
2.4.9 National Health Service policy	40
2.5 Summary	45

Chapter 3. Competence and Continuing Professional Development: The Theoretical Framework	48
3.1 Introduction	48
3.2 Competence and the qualified professional	49
3.3 Nurse education	49
3.4 Competence in practice	51
3.5 Post-registration education	54
3.6 Approaches to competence	55
3.7 Competence in nursing	57
3.8 Patients' views	58
3.9 Competence descriptors	59
3.10 Competence and teaching and learning processes	60
3.11 Assessment strategies	62
3.12 Conclusion	67
Chapter 4. The Research Methods	69
4.1 Introduction	69
4.2 Research aims and objectives	69
4.3. The setting for the study	70
4.4 The research method	70
4.5 Case study technique	71
4.5.1 Case study in education	73
4.6. Qualitative approaches	74
4.7 Types of case study	76
4.8 Multiple sources	77
4.9 Generalisability	79
4.10 Ethics	80
4.11 Validity	81
4.12 The stages of the study	83
4.12.1 Sampling	83
4.12.2 Phase one of the study	84
4.12.3 Phase two	84
4.13 Data collection	84
4.14 Data analysis	87
4.15 Summary	91
Chapter 5. Findings: The Registered Nurse to CPD student	94
5.1 Introduction	94
5.2 The characteristics of the healthcare practitioners undertaking the acute illness course	95
5.3 Motivation to undertake the acute illness course	97
5.4 The RN and CPD Student	98
5.5 Study leave	100

5.6 Study/work pressure	102
5.7 Further study	103
5.8 Discussion	103
Chapter 6. Findings: Teaching and Learning Strategies on the Acute Illness Course	106
6.1 Introduction	106
6.2 Lecture	107
6.3 Simulation	112
6.3.1 The ABCDE approach	120
6.3.2 Confidence in simulation	121
6.4 Clinical placements	121
6.5 Self directed learning	124
6.6 Discussion	125
Chapter 7. Findings: Assessment Strategies	128
7.1. Introduction	128
7.2 The clinical practical exam/OSCE	130
7.3 The portfolio	133
7.4 Choice of assessment method	136
7.4.1 Students views of being given a choice of assessment methods	138
7.4.2 Relationship to practice	139
7.4.3 Achievement	140
7.5 The essay	141
7.6 The presentation	142
7.7 The mixture of methods	143
7.8 Discussion	144
Chapter 8. Findings: Staff Development	151
8.1 Introduction	151
8.2 Practitioner development	151
8.3 Confidence	152
8.4 Staff development and the managers perspective	154
8.5 Clinical competence	156
8.6 Learning outcomes	157
8.7 Discussion	159
Chapter 9. Findings: Standards of Care	162
9.1 Introduction	162
9.2 Incidents in acute care	162
9.3 Establishment and available resources	164
9.4 Knowledge and skills	167

9.5 Expert support	168
9.6 Maintenance of knowledge and skills	169
9.7 Professional relationships	171
9.8 RN characteristics	173
9.9 Policies influence on practice	173
9.10 Knowledge and Skills Framework	175
9.11 Discussion	176
10. Conclusion	179
10.1 Introduction	179
10.2 Standards of acute care	179
10.3 Skills, confidence and competence	180
10.4 Competence in practice	181
10.5 The market need	182
10.6 Skill and competence for acute clinical practice	184
10.7 Learning approaches	184
10.8 Performance and capability feedback	187
10.9 Maintenance of competence	189
10.10 Concluding summary	191
10.11 The recommendations following the findings of this study	192
10.11.1 Practice and policy	192
10.11.2 Education	193
10.11.3 Research	193
10.12 Post script	193

Tables

2.1 Training needs analysis	42
2.2 Dependency levels of patients in hospital	43
2.3 NICE (2009) competencies - role and descriptors	45
3.1 Summary of Benner (1994) stages from Novice to Expert	52
4.1 Tree and Free nodes following data analysis	90
5.1 Characteristics of the former students on the acute illness course	96
6.1 Description of the ABCDE assessment of the acutely ill patient	120
7.1 Assessment methods chosen by students on the acute illness course involved in choice of assessment methods	137
7.2 Number of students that chose teaching package with other methods of assessment	138

Figures

4.1 Chapter titles and subheadings	93
5.1 Themes that influenced the RN becoming a CPD student	94
6.1 Teaching and learning strategies used on the acute illness course	106
7.1 Summative assessment on the acute illness course	128
8.1 Confidence/competence development	161
10.1 Model of learning strategies supporting performance feedback during the acute illness course	188
10.2 Model of acquirement and maintenance of competence	190
10.3 An explanatory framework for the development of the competent practitioners in acute healthcare	191

Appendices

Appendix 1 Module specification	212
Appendix 2 Course timetable	217
Appendix 3 Tabular exemplars of the literature review	218
Appendix 4 Four stages of shock	221
Appendix 5 University Research Office & Human and Health Sciences Research Ethics Panel (SREP) Forms	222
Appendix 6 NHS Research Ethics Committee (REC) local NHS Trusts R&D approval	227
Appendix 7 Information sheet & consent form	230
Appendix 8 Interview guide	237
Appendix 9 NVivo tree nodes	240
Appendix 10 Simulation scenario exemplar	242
Appendix 11 Transcripts of experiences of standards of care and alternative clinical placements	243
Appendix 12 Practice placement module specification	245
Appendix 13 Generic honours level marking guide	247
Appendix 14 Simulation assessment question and the marking guide	248
 References	 195

Acknowledgments

I am grateful and would like to thank, sincerely, the following people who have been invaluable throughout my studies:

Professor Peter Bradshaw, my supervisor and Director of studies for constant and continued support. Without exception, Peter has always been there with his wise words, encouragement and direction.

To all the participants who have so generously gave their time, enthusiasm and constructive input to this study.

Dr Roy Fisher, my second supervisor, particularly for setting me off in the right direction and the objective review provided and Dr Barbara Wood, Dr Jean Nhemachena and David Arthurs for their guidance and advice.

For the support from my managers and academic colleagues, particularly Stephen Prescott, the acute illness joint course leader, for helping make the course the success it is today.

For the support of my family who made possible a 'normal' life during my studies, all of whom are individually special yet too numerous to mention within the word count.

Paul and Sara for all your love and confidence in me, thank you.

Glossary

National Agencies

Department of Health (DH)

The governmental department responsible for public health issues
(www.dh.org.uk)

Modernisation Agency

The NHS modernisation agency is a part of the DH established in 2001 as a result of the NHS plan (DH, 2000). The modernisation agency ensures that investment throughout the NHS is matched by the necessary reforms to provide the highest quality of service and satisfaction for its users (www.dh.org.uk)

NCEPOD - National Confidential Enquiry into Patient Outcome and Death

NCEPOD supported and commissioned by the NPSA, they report and publish reports about the practical management of patients with the aim of improving patient safety (www.ncepod.org.uk)

NICE - The National Institute for Health and Clinical Excellence

NICE is an independent organisation responsible for providing national guidance and standards, promoting good health and preventing and treating ill health (www.nice.org.uk)

NMC – The Nursing and Midwifery Council

Set up by DH to ensure that nurses deliver a high standard of care through professional standards. The core function of the NMC is to establish standards of education, training, conduct and performance for nursing and midwifery and to ensure those standards are maintained, thereby safeguarding the health and well-being of the public
(www.nmc-org.uk)

NPSA – National Patient Safety Agency

The NPSA is a body of the Department of Health that leads and contributes to improved, safe patient care informing, supporting and influencing organisations and people working in the health sector
(www.npsa.nhs.uk)

Healthcare areas

Critical care outreach teams

A team of practitioners experienced in critical care and autonomous practice, established following Comprehensive critical care (DH, 2000). The team provide support and education for staff caring for acute and critically ill patients on all clinical areas.

ICU – Intensive Care Units

An intensive care unit (ICU), or intensive therapy unit or intensive treatment unit (ITU) is a specialised department that provides intensive care medicine to critically ill patients. Many hospitals also have designated intensive care areas for certain specialities of medicine, as dictated by the needs and available resources of each hospital.

Medical areas

The general acute medical wards provide care to patients with a host of acute problems. Examples of medical specialities include Respiratory, Cardiology, Gastro-intestinal, Endocrinology, Dermatology, Haematology and Neurology.

Surgical areas

The acute surgical area cares for patients who are going for or have had some sort of surgical intervention. Examples of surgical specialities include Gastro-intestinal, Urology, Gynaecology, Plastics, Breast and ENT.

Chapter One

Introduction and Context

1.1 Background to the study

The National Health Service (NHS) has seen significant changes and modernisation over the last two decades, particularly in hospitals within acute medical and surgical specialities. The ageing population, clinical advances in medical treatments and more complex technologies, have all led to increased levels of patient dependency (Wood et al., 2004). In consequence, the numbers of acutely ill patients throughout hospital settings are increasing (NCEPOD, 2005). Furthermore, an increasing number of services are being transferred to community settings, resulting in decreased hospital bed numbers. Acutely ill patients therefore, are commonly managed on assessment units and general wards throughout medical and surgical settings. These patients are no longer dependant totally, as they may have been in the past, on Intensive Care Units (ICU) or High Dependency Units (HDU).

As the changes in secondary healthcare services evolve, healthcare practitioners working on acute units and wards are increasingly expected to manage and care for patients who require a higher level of care than was the historical norm. A patient in hospital is described as acutely ill when their health, which may be affected by a medical or surgical condition, suddenly becomes worse (NICE, 2007). Clinical deterioration can occur at any stage of an illness however, the onset is a particularly vulnerable time for the acutely ill patient (NICE, 2007). Practitioners working within acute clinical facilities, particularly assessment units, are required to adapt their abilities to their changing environment and workload. This enhanced responsiveness therefore, requires a new and increased repertoire of knowledge and skills to apply to the rapidly changing demands of their daily duties.

To effectively care for the acutely ill patient, healthcare practitioners require high levels of skill and knowledge in monitoring and recognising physiological

observations when they change adversely, all of which are vital for the positive outcome for the acutely ill patient (Bassett & Makin, 2000). Acutely ill patients at risk of deteriorating often show signs before a serious acute or adverse event with changes in physiological observations such as by the presence of an increased respiratory rate, increased heart rate or altered consciousness. All levels of healthcare practitioners are required to have the knowledge and skill to interpret these physiological signs having therefore, the ability to identify patients most at risk of developing critical illness (DH, 2001). In consequence, it is the responsibility of healthcare staff, especially nurses, to perceptively monitor and record these observations. The prompt interpretation of physiological changes, the timely reaction and appropriate clinical management once physiological deterioration is identified, are of crucial importance to minimise the likelihood of serious adverse events for the patient, including, cardiac arrest and death (NICE, 2007).

The general public should expect when they are unwell that they can access healthcare services and receive the best possible up to date care. They should feel confident that if their condition should deteriorate, that competent healthcare practitioners will care for them safely and effectively. Yet in seminal work as early as 1998, evidence demonstrated that care of acutely ill patients on general wards was not being delivered effectively (McQuillan et al., 1998). Hence, some patients who become acutely unwell in hospital may receive sub-optimal care because their deterioration is not recognised, not appreciated or not acted upon sufficiently quickly (NCEPOD, 2005). The National Institute for Health and Clinical Excellence, in acceptance of the dangers associated with suboptimal care, published guidelines and then competencies for all levels of healthcare practitioners, in the recognition and appropriate response to the numbers of acutely ill adults in hospital (NICE, 2007; NICE, 2009).

The Department of Health and Modernisation Agency (DH, 2003) stated that supporting education did not adequately equip healthcare practitioners to care for acute and critically ill patients, particularly those outside designated critical

care departments¹. At the time, the University where this study was conducted provided specialist courses for healthcare practitioners employed in traditional critical care areas. These comprised post-registration specialist preparation in the following: Accident & Emergency (A&E), Coronary Care Units (CCU) and Intensive Care Units (ICU). McArthur-Rouse (2001) advocated that work needed to be undertaken to educate healthcare practitioners, particularly nursing staff, to adequately care for acutely ill patients in the conventional ward environment. Yet no such course was provided specifically for healthcare practitioners working beyond these boundaries within non-specialist acute units or wards to support the newly emerging developments in patterns of acute care. It was essential therefore, that the University responded to changes within partnership NHS organisations to facilitate the development requirements for healthcare practitioner' roles which in turn, being developed to meet the acutely ill patients' changing requirements.

Through a joint venture in both planning and delivery from September 2006, a course designed specifically for the effective assessment and management of the acutely ill patient within all secondary sector acute assessment units and general acute ward settings was developed by the local University. The course became known as the 'acute illness' course (Garside and Prescott, 2008). With suboptimal care of the acutely ill patient in mind, the acute illness course was designed and implemented, aiming to address the clinical concerns that were being raised locally.

1.2 The acute illness course

The University delivering the acute illness course is based in the North of England and is well established. In 2009, the University had over 24,000 students with a £120million turnover which contributed to over £300million to

¹ The patient is 'acutely ill' when their health is suddenly worse (NICE, 2007); level one, acute care is a patient at risk of deteriorating and/or recently relocated from high levels of care (Wood et al., 2004). The critically ill patient requires the whole spectrum of high technology, high dependency specialist care in hospital settings (DH, 2003). The boundaries between the acute and critical levels of care are blurred and terminologies are used interchangeably.

the local economy (University of Huddersfield, 2009). In 1996, the local colleges of health studies, which included pre and post-registration nurse education, were merged into the University School of Human and Health Sciences (SHUMS) delivering amongst others, pre and post-registration nurse education in partnership with five local districts.

The newly developed acute illness course encompassed two honours level modules, namely:

1. The Assessment Care and Management of an Acutely Ill Patient
2. The Professional Principles underpinning Clinical Practice

These modules will be discussed in more detail in the following sections:

1.2.1 Assessment care and management of an acutely ill patient

The assessment care and management of the acutely ill patient module, is the larger of the two which, on successful completion, gains the student 40 honours level credits. The emphasis of this module was placed on accurate, holistic assessment of the acutely ill or deteriorating individual in hospital, and the clinical judgement skills in order to devise subsequent and appropriate management plans from which to provide efficient and effective care interventions. To successfully complete the course the student was expected to meet the following knowledge, understanding and ability outcomes:

1. Critically analyse aspects of disordered physiology, principles of accurate physiological and homeostatic measurement in relation to the care and management of persons suffering acute deterioration of their condition.
2. Critically examine the contribution that recent developments and current research in the care and management of acutely ill patients can make to the delivery of high quality care.
3. Critically analyse provision of holistic care by the multi-professional team for the acutely ill individual with due consideration to evidence-based practice.

4. Critically appraise and demonstrate safe, competent practice of the role of the health practitioner in the assessment, care and management of the acutely ill patient and justify the need for accurate record keeping.

1.2.2 The professional principles underpinning clinical practice

The second of the two modules addressed the professional principles underpinning clinical practice, which afforded the completing student 20 honours level credits. This module provided the student with the opportunity to explore, analyse and debate current healthcare issues and apply them to their clinical practice. This module was designed for the healthcare practitioner to develop a deeper understanding of how contemporary professional principles influenced the assessment, care and management of a patient. Students were expected to critically analyse their own roles and responsibilities within the context of the multi-professional team with knowledge, understanding and ability outcomes as follows:

1. Debate the influences that inform current health care policy, provision and practice.
2. Critically appraise the role of the practitioner within integrated service provision in the context of multi-agency and disciplinary working practices.
3. Critically analyse care provision demonstrating an awareness of current political and moral philosophy, agendas, financial implications and constraints and social expectations.
4. Critically apply professional principles and legal and ethical theories within clinical practice.
5. Identify and critically rationalise individual learning requirements.

The emphasis of the professional principles module was placed on promoting the students' awareness of influences at a local, national and international level that affected the delivery of therapeutic care interventions for the patient.

Both modules supported and assessed the post-registered student using a variety of formative and summative methods. The focus was on the students'

academic development and fundamentally, their ability to apply this knowledge in acute practice. The module specifications and timetable highlighting the course content are included in Appendices one and two.

Both modules were available to registered practitioners from any healthcare profession with an interest in the assessment, care and management of the acutely ill patient. NHS and placement area employees were financially supported to undertake the course as part of the Strategic Health Authority (SHA) block funding contract (SHA, 2009).

1.3 The educational context

The acute illness course exploited a variety of approaches to learning, through different teaching and assessment strategies. Students' learning was focused on the prevention of adverse events or deterioration in the patients' condition. There is however, difficulty in substantiating the clinical outcomes of any such academic course without supporting evidence-base to truly authenticate such claims. This study therefore provided a local investigation of the learning strategies used on the acute illness course and their relationship to the intended outcome of developing healthcare practitioners' competence within acute care settings.

The competence of the post-registration practitioner was integral to the outcomes of the acute illness course and the principles of care for the acutely ill patient within clinical settings. Competence is arguably one of the most commonly used and elusive words in the language of education but is considered an essential ingredient when assessing in particular, the quality and effectiveness of the nurse education experience (Milligan, 1998; Watson, 2002). Because competence is so crucial to many aspects of the development of acute care, an exploration of the evidence is required on the entire concept and how it is influenced by programmes of education. This therefore, will be critically reviewed and embedded as the theoretical framework for this enquiry.

1.4 The educator and practitioner as a researcher.

As the researcher, I am a senior lecturer and a Registered Nurse (RN) employed by the local University. Among other duties I am responsible for the creation of the acute illness course and its joint leadership. I have therefore, a keen interest in identifying whether the course meets the outcomes identified and also employer need. The roles as a researcher, educationalist and fundamentally a RN, must be considered concerning the effect they have on relationships with the participants under investigation, not least the influence I might have on the data that were gathered.

Huberman (1996) questioned the value of practitioner research and its contribution on teaching practice and student learning. As a form of academic scholarship, practitioner research was considered as an inferior type of research with less rigorous standards than those of more conventional academic research (Borg, 1981). Huberman (1996) continued to argue the practitioner's inability to study their own practice and also to be able to bracket their preconceptions and avoid distortions and bias. Notwithstanding these criticisms of the practitioner inquiry as a legitimate form of educational research, its positive aspects justify its potential to generate original knowledge. For example, practitioner research enables a systematic and detailed exploration of the meanings from the professional perspective and the interests they represent (Popkewitz, 1994). As a registered practitioner experienced in acute care, I understand the culture, strengths and weaknesses of the NHS and the local healthcare settings, as well as some of the development needs of students. Despite this, when a location and circumstances are familiar to a researcher, a awareness of this is necessary, if the researcher is going to provide a fresh perspective on what is happening there (Gray, 2009).

Within my role as a senior lecturer and joint course leader, along with my knowledge base, perceptions and values, a certain element of subjectivity will doubtlessly have had influence on the findings of this study. Cochran-Smith

and Lytle (1993) identified that lecturers have, in the classroom a special relationship with their students and they can therefore, offer a more specific insight into the knowledge-production process than a researcher that studies someone else's practice. Richardson (1994) argued that a change of perspectives from lecturers being consumers of educational research has moved to one of the lecturer being more of a producer of educational knowledge which is the intention in this case.

This study provided an opportunity not only to investigate the understanding of the theoretical perspective of the acute illness course but in addition, it served as a platform to search for understanding and improve my everyday practice both as a lecturer and a practitioner. Reflexivity is a process of critical self-reflection about one's own biases, preferences and preconceptions and was used and embedded throughout all the stages of the study, thus reflecting on and challenging dimensions such as my professional relationships with participants and with the findings of the study (Polit and Beck, 2010). On reflection, my clinical knowledge and understanding that related to acute care was crucial for the research topic, in permitting my comprehension of the practice concepts and terminology used by the participants involved.

1.5 Summary

Suboptimal care of the acutely ill patient is a principal determinant of patient deterioration and mortality in acute hospital settings. Educational strategies have been identified as an essential requirement to support the development of healthcare practitioners' competence, in an attempt to provide a more comprehensive means to developing their skill than hitherto. Yet the claim that educational strategies improve suboptimal care requires substantial justification. The inception of the acute illness course and its subsequent aims provides the opportunity for a comprehensive exploration of this through research. This thesis therefore, will present a research study that investigated the development of skills and competence, within a course for practitioners in acute care settings and the related theoretical, educational and practical perspectives. Chapter two will present a critical review of the literature that

identified the position of skills and competence of practitioners caring for acutely ill patients. This will include the relationships between educational levels and patient care. Chapter three will then explore competence, the theoretical framework that underpinned the study. Competence will be investigated, defined and applied to the context of the acute illness course, taking into consideration its teaching, learning and assessment mechanisms. Following the literature review, the research aims and objectives were developed. An educational evaluation using the case study technique was thought to be the most appropriate research method to provide structure to the investigation. This is presented, critically rationalised and applied in chapter four. The subsequent chapters, five to nine, present the findings of the study. In these chapters the findings are integrated within the discussions as they arise and these are accompanied by critical reflection on the findings in relation to the relevant literature, rather than having a dedicated Discussion Chapter towards the end of the study. Chapter ten concludes the work with an exploration on the outcomes, originality of the study and subsequent recommendations.

Chapter Two

Care and Management of the Acutely Ill Patient in Hospital– A Review of the Literature

2.1 Introduction

This chapter will present and critically analyse the available and relevant evidence-base relating to the care of the acutely ill patient in hospital. Standards of care for this patient group were explored and any significant relationships between the literature and the research study identified. The chapter is divided into two sections and firstly, the empirical evidence is presented and then is followed by the related drivers of policy for acute care in England. The literature retrieved was multi-professional in nature although, due to my clinical background and professional expertise, the review aimed to elicit with a particular relevance to the profession of nursing.

2.2 Evidence and research based practice

A literature review is a systematic, reproducible method for identifying, evaluating and synthesizing an existing evidence-base that is produced by researchers and practitioners (Fink, 2005). It includes an organised critique of scholarly activity related to a study and is a key process in most types of research (LoBiondo-Wood and Haber, 2006). It is a crucial skill for the RN to be able to undertake a critical evaluation of existing research to inform clinical reasoning and decision-making (Polit and Beck, 2010). The purpose of a critical literature review has been defined as thus:

Theory is born in practice, is refined in research and must and can return to practice if research is to be other than a draining off of energy from the main business of nursing and theory more than idle speculation
(Dickoff et al., 1968, p.416)

Nursing practice should in essence, be based on the premise of research findings. Research is concerned with empirical knowledge and the product of such an activity is considered to be 'evidence' (Basford and Slevin, 2003).

The nursing profession is increasingly required to establish and sustain an evidence-based culture within clinical practice. The Nursing and Midwifery Council (NMC, 2008a) in the registered practitioners Code for Standards of Conduct, Performance and Ethics has stated that all RNs have a responsibility to deliver care based on the best available evidence or best practice, something that the literature will debate.

2.3 The literature search

A critical review of the literature was undertaken prior to the data collection to provide a knowledge base for the conduct of the study, thus allowing reflection of the theoretical presuppositions that inform the research context. The following section will describe the systematic tactics that were used for the literature review, prior to the presentation of the review findings and the subsequent conclusions that were made on it. It may be argued that the literature should not be reviewed at this stage in case study research because there may be a danger it may lead to a false consensus of opinion. That is to say, it may make the “data fit the framework or fail to see the unexpected” (Simons, 2009, p.33). This research however, requires conceptual organisation to identify requisite understanding, plus any conceptual bridges and structures in what is already known therefore, informing the subsequent data gathering stages (Stake, 1995).

This literature review is presented across chapter two and three and explores the concept (acute care) and the theoretical frame of reference (competence), all of which were used to inform the research questions. In addition, a doctoral study is required to produce ‘new knowledge’, it is therefore considered essential to explore any existing evidence-base to ensure originality is achieved. An ongoing exploration of the literature took place throughout all phases of the study against the themes as they emerged. This enabled the use of a continuous and interactive process, comparing the relevant evidence-base with the data as they were collected (Simons, 2009).

2.3.1 Search engines

The significant amount of the evidence for the study was generated through Metalib®. Metalib® is a resource gateway enabling access to discover and link to library resources, such as databases, e-journals, e-books, web resources and catalogues. The most relevant and generative databases in Metalib® were the Cochrane Library, Science Direct and Wiley Interscience. Other resources included searches through Google Scholar, NMC sources, the Royal College of Nursing (RCN) archives, the British Medical Journal (BMJ), Medline and Cinahl. Government documents, such as NICE guidelines and DH publications were also included within the searches as these influence many concerns that exist within acute care.

2.3.2 Search terms

Search terms were linked using the Boolean logic of combining key words with three logical operators, 'OR', 'AND' and 'NOT' (Fink, 2005). Initially, search terms included 'Acute Care' and 'Nursing' resulting in 564,387 hits therefore, the results were combined with "suboptimal care" and/or "general wards" reducing the hits to a more manageable number to review. As themes emerged during data collection, further searches of any available literature were undertaken. Other terms used included 'clinical competence', 'education' and literature that cited landmark studies.

2.3.3 Inclusion/exclusion criteria

To ensure that good quality evidence was used, selection criteria were defined prior to the literature search to assess the reliability and validity of the sources for inclusion in the review therefore, the irrelevant studies not meeting these criteria were filtered out. Such critical appraisal checklists are designed to summarise and minimise bias, providing a useful strategy to help define the most relevant questions that will lead to a decision about the relevance of any particular research study (Burns and Grove, 2005). The criteria applied were based around the following:

- Evidence from peer reviewed journals.

- International studies although, only English language publications.
- Ensuring the inclusion of a literature that was both current and had pertinent associations with acute care; hence results were confined to publications broadly within the previous ten years to ensure seminal or contemporary work. Older literature was considered for the other related concepts.
- Landmark trials and policy documents were incorporated into the review and, where available, primary sources were preferred.
- Key publications were cross-checked for other citations from their reference lists.

The initial perusal of the literature took a practical slant in which a broad range of potentially useful studies were identified. The second review focused on the methodological type and quality of what had been found. Organisation and management of the data was implemented and documented using a personal computer. The research was critiqued, compiling the data and organising it into subject headings, enabling the description of the quality of evidence supporting each study and providing conclusions across several studies (Fink, 2005). The format used to critique individual papers was based on Oxman (1994) for quantitative research papers and Critical Appraisal Skills Programme (CASP, 2002), for qualitative research. Some tabular examples of the literature review process undertaken can be found in Appendix three. The reference management software package 'Endnote' was used to document all sources used.

2.4 The literature review findings

Limited research was available on nurses' practice development in acute clinical knowledge and skills. No research was available that examined nurses' competence in relation to acutely ill patients within the UK, although relevant medical and international evidence was retrieved. On reflection, the findings and recommendations from some of these studies do have implications for nurses caring for the acutely ill patient. Furthermore, following the commencement of the study, several national reports and policy guidance

documents were published. These recognised problems in acute care and, at the time of the research, these were at the stage of implementation and were considered significant and well worthy of inclusion within the review (NICE, 2007; NPSA, 2007a; NPSA, 2007b; NICE, 2009).

2.4.1 Standards of care for the acutely ill patient in hospital

The NHS has seen decreasing numbers of hospital beds that are attributable to technological developments, the aging population and the increased complexity of medical and surgical treatments. In consequence, the number of acutely ill patients in hospital has increased. NICE (2007), in an opening statement to its document, discusses acute care in hospital, as follows:

Patients who are admitted to hospital believe that they are entering a place of safety, where they, and their families and carers, have the right to believe they will receive the best possible care. They feel confident that, should their condition deteriorate they are in the best place for prompt and effective treatment. Yet there is evidence to the contrary (NICE, 2007, p.5)

In the main, NHS hospitals provide high standard of good quality acute care. In reality, much of that care is thought by the evidence, to depend largely on the hard work and dedication of all grades of staff. It has been said that “Although 90% of acutely ill patients receive good care, as much as 10% who do not” (NCEPOD, 2005, p.3).

In 1998, a landmark study in the UK by McQuillan et al. used a confidential quantitative inquiry to analyse patient care prior to admission to ICU. In the hospitals participating in the research, major matters of concern were identified, particularly in the standards of acute care on general wards immediately prior to patients being admitted to ICU (McQuillan et al., 1998). The study took place in two hospitals in the South of England although the data’s explanatory value has aged because it was collected in 1992/3. As a standalone study, the transferability and contemporary nature of the conclusions may be questionable. Yet they have since been replicated and similar problems, namely suboptimal acute care, have been exposed in other rigorous evidence that analysed the care received by the acutely ill patient in

hospital (McGloin et al., 1999; DH and Modernisation Agency, 2003; Seward et al., 2003; NCEPOD, 2005; NPSA, 2007a).

Not surprisingly, the entire matter in standards of acute care was not limited to the UK alone. Kause et al., (2004) in their study of patients' antecedents² in the UK, Australia and New Zealand, discussed how patients who are deteriorating, or recovering from critical illness were similarly not always well managed. Although, there were proportionally more deaths in the UK (52.3% versus 35.3%) this was attributed to the increased percentage, approximately double, intensive care beds which led to a greater capacity for ICU admissions in Australia and New Zealand.

All of the studies identified, reviewed the data of acutely ill patients after the patient outcomes were known (Gorard and Young, 1999). This provides the potential for subjectivity bias on the part of the researchers because the collection of the data for their research occurred retrospectively. Seward et al. (2003) stated the truism that in retrospective reviews, it is very easy to be wise after the event. Ultimately however, suboptimal care had clearly been related to increase death rates of acutely ill patients (McQuillan et al., 1998; Seward et al., 2003; NPSA, 2007a). The NPSA stated that many serious incidents "could be interpreted as potentially avoidable and related to patient safety issues" (NPSA, 2007a, p.9).

2.4.2 Failure-to-rescue

Suboptimal care is multi-faceted and involves many influencing variables that have often resulted in acutely ill patients initial treatment either being delayed, inappropriate or both (NCEPOD, 2005). Suboptimal care in these instances was attributed to the inadequacy of the abilities of the hospital staff responsible for patients care. Firstly they failed to recognise or appreciate the severity of the problem when the acutely ill patient presented or began to deteriorate (McQuillan et al., 1998; NICE, 2007). The second manifestation of

² Physiological signs of a patients' deterioration

suboptimal care compounded the first through the inappropriate, insufficient or untimely implementation of treatment or management options (McGloin et al., 1999; Kause et al., 2004).

In the early nineties Silber, a patient outcome researcher from the United States (US) recognised the phenomena associated with suboptimal care and defined them by the term, 'failure-to-rescue' (Silber et al., 1992). Silber's belief was that the acutely ill patients' safety and positive outcome was dependant on two phases; firstly the close surveillance and timely identification of any deterioration, followed by a prompt and effective response to the deterioration (Clarke, 2004). If this two stage process was not adequately implemented, then the term 'failure-to-rescue' was believed to have occurred. Whatever the nomenclature and notwithstanding any limitations of the studies about it, failure-to-rescue or suboptimal care had been identified to have severe and unnecessary consequences in morbidity and mortality for the acutely ill patient. Indeed, suboptimal care/failure-to-rescue has been identified as the contributing factor to as many as one third of hospital deaths (NICE, 2007).

Cardiac arrest is often a predictable event, and usually follows a period of progressive deterioration (Resuscitation Council (UK), 2005). Action taken during the early stages of acute illness can prevent deterioration and progression to cardiac arrest (Smith and Poplett, 2002). In recognition of the significance of the timely assessment and management of the acutely ill patient, the following section will discuss the altered physiology of 'clinical shock' and the signs and symptoms with which the acutely ill patient often presents.

2.4.3 The physiology of clinical shock

Shock may involve failure of one or more body organs due to a patients' illness. Yet, the human body is sophisticated in responding to this and implements a system of compensatory mechanisms to maintain cardiac output and essential organ functions (Tortora and Derrickson, 2006). While in

the early stages of shock the physical signs of patient deterioration are subtle and require skill to detect nevertheless, depending on the reversibility of its cause, this early stage is fairly easy to treat and reverse.

In the early stages of shock there are often subtle changes in the patients' heart rate with the occurrence of tachycardia or bradycardia and similar respiratory changes such as tachypnoea or bradypnoea. If these signs are not recognised and managed promptly and appropriately, death will occur (Seward et al., 2003; McArthur-Rouse and Prosser, 2007). Once the patient becomes unable to physically compensate and maintain an effective cardiac output, the condition becomes much more difficult to treat and reverse (Kumar and Clarke, 2006). Only when the body is unable to compensate does the patient show clear physiological signs of deterioration (Woodrow, 2006). At this point the patient is overtly hypotensive and becomes increasingly tachycardic and tachypnoeic. McArthur-Rouse and Prosser (2007) described four progressive stages of shock which can be found in Appendix four. Many healthcare practitioners rely on the blood pressure (BP) as a salient indicator to intervene or call for help. Yet by this time the patient is usually at the third stage of shock, the progressive stage which is often extremely difficult to reverse (McArthur-Rouse and Prosser, 2007).

This makes the healthcare professional's role to improve patient outcomes very challenging. All patients should be observed vigilantly for any subtle changes in physical symptoms at the early physical stages of shock. Practitioners should also be competent in the early management of these subtle changes because it is these physiological abnormalities of the disease process that causes the patients' deterioration and/or death (McQuillan et al., 1998).

2.4.4 Antecedents of clinical deterioration in the acutely ill patient

Many acutely ill patients have significant antecedents as they progress through the stages of shock prior to actual adverse events namely, unexpected deterioration requiring admission to ICU, cardiac arrest and/or

unexpected death. Kause et al. (2004) identified 60% of adverse events were preceded by documented evidence of abnormal physiology. Mortality levels were significantly increased with the number of physiological abnormalities recorded: 0.7% deaths were recorded with no physiological abnormalities, 4.4% with one, 9.2% with two and 21.3% with three or more (Goldhill and McNarry, 2004).

Within these studies, patient documentation identified pathological signs that gradual deterioration was imminent, were apparent more than 12 hours before admission to ICU and in 21% of the cases, if the antecedents had been identified and managed, ICU admission or death would have been avoidable (NCEPOD, 2005). Early detection therefore, of antecedents and their appropriate management by healthcare staff was likely to result in a positive benefit for patients (NICE, 2007).

Antecedents identified in patients prior to adverse events include:

- Threatened airway - involving unrecognised or inadequately treated hypoxaemia (low blood oxygen levels)
- Respiratory rate <5 (bradypnoea) or >36 (tachypnoea)
- Pulse rate <40 (bradycardia) or >140 (tachycardia)
- Systolic BP <90 mmHg (hypotension)
- Fall of Glasgow Coma Scale (GCS) by two points or more
- Prolonged seizure activity

(Kause et al., 2004, p.279)

The pulse rate, BP and temperature were the most frequently recorded vital signs of the patient in hospital and the respiratory rate was the least recorded variable despite it being one of the earliest and most sensitive indicators of deterioration of the acutely ill patient (NPSA, 2007a).

2.4.5 Elements of suboptimal care

Suboptimal care was attributed to a deficiency in healthcare practitioners' knowledge regarding the significance of clinical findings of patients'

physiological signs and symptoms (Resuscitation Council (UK), 2005). These determinants of the destiny of acutely ill patients' include the failure-to-recognise deterioration and implement appropriate management (McQuillan et al., 1998). Yet, further contributions identified to suboptimal care included, failure to monitor patients with sufficient diligence and the unsystematic examination of patients, failure to use appropriate oxygen concentration therapy and implement fluid replacement when required (Seward, et al., 2003). Finally, recognising and managing a cardiac arrest, with factors such as not identifying when a patient has had a cardiac arrest, not initialising resuscitation procedures or calling for required expert teams to implement advanced life support are all contributors (Resuscitation Council (UK) 2005).

2.4.6 The prevalence of suboptimal care

The patient may become acutely ill at any stage of an illness or in any hospital ward, unit or clinical speciality. Deterioration was however, found to be more common following certain stages of an illness, this included onset, which was often prior to or during emergency admission to hospital, during recovery from a serious illness or during medical or surgical interventions (Seward et al. 2003; NICE 2007). Seward et al. proceeded to identify that approximately 90% of hospital acute and general ward occupancies present as emergency admissions. The importance therefore, of the assessment and management of the acutely ill patient, specifically during the first 48 hours following admission cannot be underestimated in producing successful outcomes (Leman, 2007).

Suboptimal care was described following studies that reviewed patient management before admission to ICU. Hence sub-optimal care and failure-to-rescue the acutely ill patient was described as occurring on general wards as opposed to critical care areas, emergency departments or operating theatres (McQuillan et al., 1998; Goldhill and Sumner, 1998; McGloin et al., 1999). Patients on general wards also had a higher rate of significant antecedents recorded for longer periods prior to major adverse events (Hillman et al., 2002). As a consequence of this, more patients from general

wards were late admissions to intensive care or alternatively, required intensive care facilities which may have been unnecessary if the patients had been managed more appropriately. These factors all culminated in a higher percentage of deaths occurring from patients admitted to ICU from general wards due to the sub-optimal care they had received prior to their transfer and again many of these deaths were described as avoidable (McGloin et al., 1999). These findings however, were likely to represent the 'tip of the iceberg' of preventable deaths on the wards because other acutely ill patients with potentially treatable conditions may have been deteriorating on the wards beyond the point where admission to intensive care could be of benefit therefore, the patient would not be eligible for these studies (Goldhill et al., 1999). Suboptimal care was therefore, likely to be much more common practice, but often not recognised or reported within the evidence (NPSA, 2007a).

Often the patients classed as the 'problem cases' that received suboptimal care were admitted to hospital in the evening or during the night (Seward et al., 2003; NPSA, 2007a). This was thought to be due to a reduced number of staff, particularly senior or more experienced. At night there were also less available facilities and resources which caused significant delays for the acutely ill patient being reviewed and investigated. Junior staff members have been recognised as a group who do not always seek support when necessary (NCEPOD, 2005). Seward (2003) confirmed positive outcomes were often related to the promptness of the senior medical review which may not be as timely during night hours.

In addition, the twenty-first century has seen an increase in a target driven system in the NHS which may influence adversely, the experiences of the acutely ill patient. The four hour maximum stay in emergency departments may also have resulted in many acutely ill patients being rapidly moved to general wards before they exceeded the target time limit and perhaps before a detailed and complete assessment had been undertaken (DH, 2004b; Leman, 2007). It has been argued that suboptimal care may also have a

major detrimental effect on financial targets if more patients were unnecessarily accessing ICU beds at an average cost of £1716 per night as opposed to them occupying a ward bed costing £220 per night (NICE, 2007).

2.4.7 Suboptimal care variables

Assessment and management of the acutely ill patient is multifaceted with many precipitating phenomena that impact on patient outcomes, including age, elective or emergency status, co-morbidities, character and severity of the patient's illness. Of these factors the latter has been shown to have the greatest impact on mortality outcomes (McQuillan et al., 1998; Blegen et al., 1998). With attempts to avoid suboptimal care, other potential causes and underlying factors that could be better managed, require identification to enable care to be improved. The following section presents the deficiencies and influencing factors identified within the evidence-base concerning suboptimal care of the acutely ill patient in hospital.

2.4.7.1 Communication failure

Poor communication has been identified as one of the fundamental factors that aggravates and compounds instances of suboptimal care and has been suggested to be the biggest problem contributing to patient deterioration during acute care (NPSA, 2007b). Adverse elements were identified within healthcare teams, concerning both verbal and documentation skills. These related particularly to the specificity of written communication of patients care needs that resulted in inadequate action to meet them. Significant times when ineffective communication occurred were during staff handover sessions or when the acutely ill patient was being transferred to another area of care (NICE, 2007).

The failure of healthcare staff to identify a problem and seek advice from more senior staff was a problem found for both nursing and medical staff. Difficulty was identified for nurses to communicate effectively and convincingly, especially in persuading medical staff to either visit the ward or to take appropriate action that may be required (McArthur-Rouse, 2001). This was

attributed to nurses' inadequacy in articulating their observations and concerns. The reasons cited were seen firstly as the result of poor interpersonal skills amongst nurses and secondly, the junior doctors' inexperience or reluctance to contact or seek help from their senior colleagues (Seward et al., 2003). In some instances, some staff were not even sure which person to call for help (NPSA, 2007b).

2.4.7.2 'Do not resuscitate' orders

Of patients who are acutely ill, inevitably and naturally some will die as a result of their illness (NPSA, 2007a). There was however, insufficient use of treatment limitation plans when positive patient outcomes were no longer predicted (Smith and Poplett, 2002). Hence the patient and their relatives may be subject to unnecessary resuscitation procedures, prolonging the inevitable and potentially denying a dignified and peaceful death. Death is not necessarily an unsuccessful outcome if it is inevitable and death is obviously only an unsuccessful outcome if it could have been avoided. The evidence suggests that more forethought should be given to all patients' resuscitation status, preventing any unnecessary end of life distress.

2.4.7.3 The multi-professional team

Although initial studies identified suboptimal care as a matter of concern for the whole multi-professional team, many research studies have been led by physicians (McQuillan et al., 1998; McGloin et al., 1999; Seward et al., 2003). The subsequent recommendations of these studies focused primarily on the medical profession, pointing the need for example, for an increase in the seniority of the doctors and suggested changes in medical training. Patient outcomes were also affected by the care from other disciplines (Blegen et al., 1998). Clarke (2004) discussed how good outcomes were not necessarily thought of as being connected to nurses' actions, but attributed directly to physicians' efforts. Yet it was more common for perception of poor outcomes to be linked to nurses and serious errors they were believed to have made. The logical conclusion is that skill and competence enhancement in managing acutely ill patients is a multi-professional concern applying to entire teams of

doctors, nurses, therapists and other healthcare professionals which is addressed in more recent evidence (Garrard and Young, 1998; NPSA 2007b; NICE, 2007).

2.4.7.4 Registered nurse skill mix and educational levels

Nurse patient ratios in acute care have a significant impression on the quality. Other staffing variables that also influence concern are the number of RNs to Healthcare Assistants (HCAs). An additional influential observation is the years of experience of the RN (NPSA, 2007b). There are great pressures to reduce the labour costs in delivering various healthcare services by diluting the skill mix (Clarke, 2004). In consequence due to constrained NHS budgets, there are increasing tendencies to use fewer RNs and more HCAs, the latter being less educated and trained than RNs but who are clearly cheaper to employ than their qualified counterpart.

Research dating from the 1960's identified that a low RN to patient ratio acted adversely on the quality of patient care (Safford and Schlotfeldt, 1960). Similarly, nearly forty years later, from a large hospital in the US, Blegen et al., (1998) found a positive relationship between the total complement of RNs and adverse incidences in hospital and mortality rates. The study evidenced incidents were deaths, falls, medication errors, infections and decubiti complications were all significantly lower on inpatients units with a higher skill mix of RNs. Blegen et al.'s study took place in one institution only therefore, generalisability of its findings may be limited. Yet similar themes to theirs have continued to emerge in more recent research from other literature (Aiken et al., 2003; Torangeau et al., 2007; Rafferty et al., 2007).

Many of the studies describing suboptimal care did not review in any detail the different educational levels and skill mixes of the healthcare teams, particularly within the nursing staff (McQuillan et al., 1998; McGloin et al., 1999; NCEPOD, 2005). It has been argued that RNs comprise the surveillance system for identifying complications and changes in the patients' condition. When at the bed-side, the RN is in the best possible position to

initiate appropriate assessment and management and to minimise negative outcomes for the acutely ill patient (Clarke, 2004). Many studies identified the problems in care outside ICU, although the evidence is sparse about staffing levels on intensive care settings in comparison to general ward settings. In most ICUs there is one RN caring for every patient whereas general wards may have had up to 14 patients per nurse, suggesting strongly that the acutely ill patient on a general ward is at considerable risk from poor observation and delayed intervention (Rafferty et al., 2007).

Aiken et al. (2002; 2003) undertook a cross sectional data analysis exploring patients' outcomes (n = 232,342) from 168 US hospitals using a survey. They claimed that hospitals with higher proportions of RNs educated at baccalaureate level or higher, are associated with improved patient outcomes and lower mortality rates. The risk of death was more than 30% higher in hospitals where RNs mean workload were eight patients or more each shift, compared to those who cared for four or fewer patients (Aiken et al., 2002). In addition, Aiken linked education levels to the concept of failure-to-rescue, in that a 10% increase in the proportion of RNs with higher degrees, decreased the risk of mortality or failure-to-rescue by five percent. Although a large sample was selected, the authors recognised limitations within this study of bias within the respondents' perceptions of the circumstances concerning patient deterioration and death that can be an emotive matter for the nurses who have witnessed it.

Rafferty et al., (2007) in a UK version of Aiken et al.'s (2002; 2003) study, explored 30 English hospital trusts and the relationship of patient mortality to skill mix. They identified similar themes, in that they found a large and consistent effect of RN staffing levels on mortality outcomes in surgical patients. Aiken et al., (2003) had identified surgical patients that had serious complications after surgery were significantly more likely to survive in hospitals with a higher proportion of RNs to patient ratio. These two studies add confirmation to the proposition internationally that the higher the proportion of RNs in a ward team, the better patient outcomes.

Tourangeau et al. (2007), in a multicentre study in Canadian teaching and community hospitals, included large sample numbers of patients ($n = 46,993$) and data collection used quantitative methods to calculate risk and case mix adjusted, hospital 30-day mortality rates. The study also considered the influence skill mix on outcomes. Unlike Aiken et al., (2002) and Rafferty et al. (2007) who were interested in surgical patients, Tourangeau et al., explored the mortality rates of medical patients. They noted that a 10% increase in the proportion of RNs was associated with six fewer deaths for every 1000 patients discharged. Additionally, a 10% increase in nurse-reported adequacy of staffing and resources was associated with 17 fewer deaths per 1000 patients discharged. Medical patients by definition, often has more intricate needs and co-morbidities than the surgical patient and many high risk patients are simply not be considered for surgery. This means that the direct comparison between the two categories of patients may be difficult but nevertheless, similar conclusions emerged concerning beneficial the effect of a healthier skill mix on the outcomes for acutely ill patients.

The prime cause of substandard care of the acutely unwell patient in hospital is the lack of knowledge and appreciation of clinical urgency, which culminated in the failure to recognise the deteriorating patient and subsequently initiate appropriate therapy (NCEPOD, 2005). Tourangeau et al., (2007) indentified that structures and processes, such as pathways, protocols and algorithms within hospital nursing care had a decidedly advantageous bearing on the 30-day mortality for acute medical patients. Tourangeau et al., (2007) concluded by recommending that hospitals should maximise the proportion of RNs in providing direct care, even if this results in lower total numbers of nursing personal to care for acute medical patients. The rationale for this is that the acutely ill patient requires nurses with an increased knowledge and skill base to enable sophisticated clinical judgements to be made to provide safe, high quality care for patients' multi-faceted needs. Good patient outcomes were thought to be clearly the result

of skilful decisions and actions on the part of educated and more experienced nurses (Clarke, 2004).

A significant factor with a negative effect on quality care for the acutely ill patient was the deficit in fundamental skills and knowledge among healthcare staff according to government reports (DH, 2003). Often also from other evidence, medical and nursing staff members did not possess acute care knowledge and skills and lacked confidence when dealing with acute-care problems (Smith and Poplett, 2002). Many of the cited studies recognised that changes in the curriculum were required for all levels of multi professional staff to avoid suboptimal care (McQuillan et al., 1998; McGloin et al., 1999; NPSA 2007b). The DH and Modernisation Agency (2003) identified that current education does not properly equip healthcare providers to care for critically ill patients, particularly those outside designated critical care departments. But more worryingly, little is known of the specific training needs of the ward staff caring for these patients (McArthur-Rouse, 2001).

Rafferty et al. (2007) identified that eight percent of nurse respondents in her study held first or higher degrees. It was not identified however, whether the qualification had been gained through pre-registration training or was a consequence of CPD study. No further discussion was conducted on the educational levels of the other 92% of nurses in this work. Another study demonstrated little explanatory research to be available on the effectiveness of CPD education, particularly on patient care (Tennant and Field, 2004). CPD was usually measured according to the participating students' view of the perceived benefit of the teaching encounter rather than any formal objective measurement of its influence on patient care. Employer satisfaction with CPD study and the ability to do a better job was usually generated in a more anecdotal way and it seemed that changes in practice were rarely measured other than by perceptions (Hicks and Hennessey, 2001).

On this subject, Tennant and Field (2004) concluded that CPD did make a positive difference to practice, their qualitative study was, however, a very

small sample (n = 7) and was based on a specialist ICU course. Furze and Pearcey (1999) argued that CPD outcomes were usually based on the practitioners' subjective view of the perceived benefit of the educational programme, without any objective measure of patient care. Hicks and Hennessey (2001) concurred with discussions around CPD activity being evaluated with emphasis on 'comfort factors' and satisfaction with teaching rather than with the contribution such experiences have on current practice. Hardwick and Jordan (2002) surveyed post-registration nursing students on their perception of the impact of their studies on their clinical practice. They reported some change in practice and new knowledge although very little detailed data was extrapolated. Post graduate education has been related to perceived enhanced clinical credibility and leadership (Gerrish et al., 2003) with further evidence that demonstrated subsequent promotion as a result of practitioners increased confidence and ability following Masters level CPD study (Drennan, 2008).

2.4.8 Education and training needs

The nurses' role enables them to be in constant contact with patients to identify the symptomatology of deterioration by using a systematic means of patient assessment (Allen, 2004). Hence, appropriate physiological signs can be identified early and the correct treatment initiated in a timely manner by either the RN or by the RN availing of other appropriate skilled help.

Recording baseline observations is no longer sufficient because the emphasis on criteria for clinical effectiveness and value for money means a greater level of skill is required. Healthcare practitioners need a sound knowledge of anatomy and disordered physiology to facilitate the in-depth interpretation of observations as well as a comprehension of the pathology and nursing management of common illnesses (McQuillan et al., 1998; Watson, 2006). Empirical work suggests that skills and knowledge relating to the assessment and management of the acutely ill patient are often presumed despite there being little explicit guidance regarding what should be formally taught about effective acute care (Wood et al., 2004).

Smith and Poplett (2002) identified a failure to use a systematic scheme to assess the critically ill patient as a significant shortcoming and a further cause for concern was the inappropriate monitoring of vital signs and a failure to act upon them (NPSA, 2007b). Specifically, practitioners were not calculating early warning score (EWS₃) correctly (Smith and Poplett, 2002; NPSA, 2007a). Being able to calculate EWS correctly is an essential skill to identify when a patient may be deteriorating and it is a significant warning sign that rapid intervention is needed (NPSA, 2007b). Although, it is argued that if all practitioners possessed effective assessment skills, such early warning systems would be redundant, but this is not the case (Wood et al., 2004).

Wood et al. (2004) undertook a qualitative piece of research commissioned by their local Strategic Health Authority. The study's aims were to identify education and training needs for acute care delivery. The researchers conducted focus groups for different levels of staff (n = 25) and investigated the definitions of acute and critical care and the knowledge and skills required to assess and manage the acutely ill patient. The study, despite its small sample when judged besides other complementary work, identified clear empirical links between educational deficits and the occurrence of suboptimal care (McQuillan et al., 1998; McGloin et al., 1999; NPSA, 2007a; NPSA, 2007b). Wood et al. (2004) unearthed a range of training needs and identified specific dimensions of knowledge and skills, demonstrated in table 2.1. It is suggested also that factors such as communication skills, critical thinking and judgement skills are also central for the detection and prompt intervention to best assist the acutely ill or deteriorating patient.

2.4.9 National Health Service policy

In 1999, the Department of Health (DH) convened an expert group to develop a framework for the future organisation and delivery of critical care. This led

3 EWS or MEWS (modified early warning scores) or track and trigger system. These systems are used to identify patients at risk of deterioration by allocating scores against physiological vital signs recorded. Higher scores require referral of the patients to critical care outreach or medical emergency teams for assessment and management.

to a major modernisation programme for critical care services (DH, 2000). The aim of the reform was to provide an integrated service for critically ill patients, incorporating a hospital wide mechanism that extended beyond the boundaries of intensive care units, thus affecting the delivery of acute care as a whole. The review aimed to address the increasing numbers of critical and acutely ill patients being treated on general wards by focusing comprehensively on the needs of these patients anywhere in the hospital, rather than the particular case mix classification that traditionally has concerned the perceived level of care. Thus critical care was judged to be an individual clinical requirement not one that should be determined by the perceived needs of a ward or unit environment. The DH (2000) made explicit four 'levels' of dependency wherever the care was being delivered. These dependency levels are identified in table 2.2.

The DH (2001) identified that the programme of care could be delivered with the support of specialist practitioners or, it may mean the transfer of care to a clinical unit providing higher level care. The Department advocated that all services should be underpinned by reliable information through data collection, thus promoting a culture of evidence-based practice. Its recommendations focused on a structured and planned approach to the workforce development of all who manage the critically ill patient. This included the training of medical, nursing staff and relevant members of the healthcare team. Increased ICU beds and Medical Emergency Teams (MET) were expected to positively influence outcomes from critical illness (Kause et al., 2004). Some UK hospitals had since implemented METs however, the non-medical version of the critical care outreach team is more common place (McArthur-Rouse, 2001).

Table 2.1 Training needs analysis. (Wood et al., 2004)

<u>Knowledge needs for patient assessment</u>	
1.	Fundamental anatomy and physiology
2.	Relationships between body systems
3.	Common pathologies (e.g. respiratory distress, 'shock')
4.	Use and limitations of equipment (e.g. pulse oximetry, types of tracheotomy tube, sizes of suction catheter, resuscitation equipment)
5.	Hydration status
6.	Interpretation of investigation results
7.	Relevant at risk tools MEWS
<u>Skills needs for patient assessment</u>	
1.	Assessment of airway status
2.	Assessment of respiratory function
3.	Assessment of cardiovascular function (BP, heart rate, pulse volume, ECG interpretation and cardiac rhythm recognition)
4.	Assessment of neurological status
5.	Measuring and recording of all other vital signs (temperature, blood glucose)
6.	Assessing efficacy of pain relief
7.	Recognising when a patient is deteriorating
<u>Skills and knowledge need for patient management</u>	
1.	Appropriate positioning of patients to aid respiratory function
2.	Administration and humidification of oxygen
3.	Suctioning
4.	Tracheotomy care
5.	Care of the patient with a central venous line
6.	Acute care drugs and medications
7.	Investigation trends
8.	Application of at risk tools

Table 2.2 Dependency levels of patients in hospital (DH, 2000)

Level 0	Patients whose needs can be met through normal ward care in an acute hospital
Level 1	Patients at risk of their condition deteriorating, or those recently relocated from higher levels of care, whose needs can be met on an acute ward with additional advice and support from the critical care team
Level 2	Patients requiring more detailed observation or intervention including support for a single failing organ system, or post-operative care and those 'stepping down' from higher levels of care
Level 3	Patients requiring advanced respiratory support alone or basic respiratory support together with support of at least two organ systems. This level includes all complex patients requiring support for multi-organ failure

The DH (2001) recommended that ward staff caring for acutely ill patients should have access to education and training linked to level of care (0-3) to ensure they are competent to assess and manage the acutely ill patients who are at risk of deterioration. The only link to dependency levels were for level 2 or 3 patients who “require a continuous or intermittent but regular observation, care, and intervention provided by the clinical team” (DH, 2001, p.10). No discussion or recommendation was given in the guidance to the needs of the acutely ill patient at level 0 or 1. It was contended that if this level of patients were regularly observed by skilled staff the physiological signs of shock may be identified prior to deterioration to level 2 or 3 (Kause et al., 2004).

More recently and almost a decade after the publication of the work of McQuillan et al. (1998), the National Institute for Health and Clinical Excellence (NICE) published clinical guidelines (CG50) on the recognition and response to acutely ill adults in hospital (NICE, 2007). The guidelines were published alongside the NPSA (2007a) report that analysed serious incidents

in acute care reported by NHS Trusts. The NICE (2007) guidelines listed a number of key recommendations. These include detailed attention to the main facets of acute care such as physiological observations which should be recorded and how they should be acted upon, by whom and how frequently.

One of the NICE recommendations stated that:

Staff caring for patients in acute hospital settings should have competencies in monitoring, measurement, interpretation and prompt response to the acutely ill patient appropriate to the level of care they are providing. Education and training should be provided to ensure staff have these competencies, and they should be assessed to ensure that they can demonstrate them (NICE, 2007, p.8)

Following a major consultation exercise and supporting the recommendations of NICE (CG50, 2007), a framework of competencies was published for recognising and responding to acutely ill patients in hospital (NICE, 2009). These competencies identified specific skills and knowledge required for a variety of levels of staff, to effectively recognise and appropriately respond to the acutely ill patient and this prescription for action focused on the clinical and technical aspects of care and the delivery of effective patient management. These included structure, for example, on respiratory, cardiovascular, neurological assessment and overall management of care. Specific groups of staff were identified in the first three groups, then the 'Primary responder' level and beyond, focused on the more experienced registered practitioner, not a professional group or role. The descriptors were dependent on level of experience, education and the skills and competence to execute that role effectively in a variety of clinical settings. The descriptors of these roles can be found in table 2.3. Acute hospitals therefore, have a responsibility to implement the changes required to improve the competence of staff delivering care to the acutely ill patient.

Table 2.3 NICE (2009) competencies - role and descriptors

Role	Descriptor
Non clinical supporter	The alerter, may be the patient or visitor.
The recorder	The person who takes designated measurement records observations and information. This would usually be at healthcare assistant level.
The recogniser	The person who monitors the patients' condition; interprets designated measurements, observations and information and may adjust the frequency and level of observation. This level of competence would usually be the aimed at the newly qualified RN as a baseline skill set.
The primary responder	The person who goes beyond recording and further observation by interpreting the measurements and initiating a clinical management plan e.g. commencing oxygen therapy; insertion of airway adjuncts, selection of intravenous or bolus administration of fluids.
Secondary responder	The person who is likely to be called to attend when the patient fails to respond to the primary intervention, or continues to 'trigger'. This person will assess the clinical effect of the primary intervention; formulate a diagnosis; refine the management plan, initiate a secondary response and will have the knowledge to recognise when referral to critical care is indicated.
Tertiary responder	The person that has the necessary critical care competencies such as advanced airway management, resuscitation and clinical examination and interpretation of critically ill patients.

2.5 Summary

The changes in the nature of healthcare and the increasing number of acutely ill patients have seen an inadvertent, but nevertheless, detrimental influence in the standards of acute care in hospital settings. The evidence points to healthcare practitioners, particularly on general wards who are 'failing to rescue' the acutely ill patient, in that they are not recognising or responding appropriately to the deteriorating patient, which has direct consequences on increased patient mortality. Of more concern is that in reality, what statistically is known, may disguise the true extent of the problem and the true occurrence of suboptimal care may be underreported.

Acutely ill patients present with many different pathologies that have a significant impression on outcomes with most deteriorating patients experiencing antecedents or warning signs up to 12 hours prior to adverse events that are considered to be avoidable if acted upon promptly (Kause et al., 2004; McGloin et al., 1999). To prevent harm and ultimately reduce in-hospital cardiac arrests and mortality rates, it is seen as essential that, through education, skills training and the generation of knowledge and competence that healthcare practitioners be properly equipped to identify symptoms and deal with them (McArthur-Rouse, 2001). The literature strongly confirms that RNs are the profession group in a prime position to take a lead to prevent unnecessary patient deaths (Tourangeau et al., 2007).

Each hospital has a unique mix of structures and processes that influence patient mortality (Tourangeau et al., 2007). The DH (2007) has responded to the evidence (McQuillan et al., 1998; McGloin et al., 1999; Seward et al., 2003) by reviewing and sequentially concurring that the suboptimal care of acutely ill patients in hospital is indeed a major problem that requires action (NICE, 2007). NICE recommends that institutional support is needed to make improvements in acute care. It advocates particularly for the provision of education and training and the development of competency levels of staff who deal with acutely ill patients. NICE (2007; 2009) standards, competencies and guidelines offer a clear structured means to tackle suboptimal care and provide a template for healthcare staff at all clinical levels to implement.

There is unquestionably much room for improvement in care standards for acutely ill patients on general wards (NCEPOD, 2005; NPSA, 2007b). These matters are compounded by several influencing factors including the need for higher RN to patient ratios, the strengthening of skill mix and improved educational levels, all of which have a positive influence on the outcomes for surgical and medical patients (Aiken et al., 2002; Tourangeau et al 2007). Further investigation is clearly required to identify that causal and effect relationship between improved nurse and medical education and patient

outcomes simply because very little evidence on this is available (Aiken et al., 2003; Kause et al., 2004; NICE 2007).

The development of the knowledge, skills and competence of RNs caring for the acutely ill patient through CPD education is fundamental and underpins the theoretical framework that informed the design of this study. This led to questioning and analysis of the interrelationship between knowledge and skill that is often described as 'competence'. As a result, the following chapter will endeavour to explore and analyse the concept of competence and any relationship it might have to the education or delivery of acute nursing care. This will be related to the teaching, learning and assessment of CPD students and RNs in acute clinical practice.

Chapter Three
Competence and Continuing Professional Development:
The Theoretical Framework

3.1 Introduction

The aim of this chapter is to clarify and define the concept of competence and how it is interpreted for the purposes of this study. Specific relationships between continual professional development (CPD), the RNs and their ability to perform effectively in the care of acutely ill patients will emerge. The chapter will also examine how teaching, learning and assessment strategies can be used to generate competence in practitioners who undertake the acute illness course that is the focus of this work.

Educational solutions have been identified as one strategy to improve instances of suboptimal care of the acutely ill patient in hospital (NCEPOD, 2005; NICE, 2007). RNs access CPD through a variety of routes such as work-based programmes, 'on the job' experience or accredited academic courses delivered by universities. Yet, minimal quality empirical evidence exists that explores the influences of these educational experiences on RNs' competence to better care for patients (Aiken et al., 2003; Tennant & Field, 2004; NICE 2007). Most educational evaluations focused purely on the perceived relevance of the course content and quality of the teaching and learning processes (Eraut, 1994). The synergies between teaching, learning processes and clinical performance are thus an important facet of the study.

A primary concern of the work is to understand the underpinning conceptual basis and principles that define the concept of competence and competency development and how these inform our understandings of it. Theoretical frameworks include sets of interrelated concepts that provide a systematic view of a phenomenon and these assist in defining a research problem (Silverman, 2010). This process has been defined as follows:

Theory guides practice and research; practice enables testing of theory and generates questions for research; research contributes to theory-building and establishing practice guidelines. Therefore what is learned through practice, theory and research interweaves to create the knowledge fabric of the discipline of nursing (LoBiondo-Wood and Haber, 2006, p.113)

3.2 Competence and the qualified professional

The general public assumes the qualified practitioner to be competent in the execution of professional tasks and duties expected of that profession (Eraut, 1994). The term competence is frequently used in reference to professional people of all kinds and especially so in relation to healthcare practice. It is considered an essential ingredient when assessing a practitioner's ability to provide effective nursing care (Watson, 2002). Competence however, is generally regarded as an elusive entity when it comes to its actual meaning. Watson et al., (2002, p.422) argued that "competence is a somewhat nebulous concept which is defined in different ways by different people" and there is no universal definition of competence although the concept is integral to the principles of many nurse educational programmes (Milligan, 1998). Many of these programmes claim that they are designed to develop the students' competence to deliver more effective nursing care to the patient. Hence, ambivalent definitions of what genuinely comprises of competence is not solely a challenge for nursing, but has significance for all professions such as teachers, solicitors and doctors (Eraut, 1994; Epstein and Hundert, 2002).

3.3 Nurse education

In the late 1980s, nurse training transferred from hospital-based, unaccredited, apprentice style courses in NHS schools of nursing to accredited university based programmes with the adoption of Project 2000, which saw the move of nursing to diplomat and graduate status (United Kingdom Central Council for Nursing, Midwifery and Health Visiting (UKCC) 1986). The new style programmes served to verify the knowledge-base of student nurses, to support a more questioning practitioner and to cultivate a more critical interpretation of nursing care and its delivery. This was valued

throughout the nursing profession. Nurse education has first and foremost, been regarded generally as a vocational activity. Project 2000 saw the progression to a dual purpose programme that required nurse educationalists to meet both university academic and professional body, clinical standards. This produced the concept of the RN as a 'knowledgeable doer' (UKCC, 1986). Theoretical assessments were positioned alongside the assessment of clinical competence and theory was assessed in the classroom and competence within the practice setting. But the change was characterised by a mixed reception and the agendas of universities, the NHS, the Government and professional bodies caused significant challenges. The detractors from the move seemed to feel that a competent nurse should be trained while the advocates argued that the nurse should be both trained and educated.

Competence was thus, firmly embedded in Project 2000 pre-registration nursing which led to it becoming a controversial issue, particularly when clinical competence and elements of the more formal educational preparation appeared to be in conflict because of the stereotypical norm and the general perception was that universities prefer scientific rather than professional knowledge (Barnett, 1994). Yet universities have high interest in their marketability and the structured production of academic modules that make students employable and the courses that are their commodity, had to adapt to the NHS requirement that students should be fit for purpose. This was something that was believed to have posed a threat to the university as, "user derived standards threaten its hegemony" (Eraut, 1994, p.15). Modularised education systems came in that supported the structured division of academic knowledge and clinical practice in the profession. These used many different learning strategies in their attempt to provide a coherent learning experience. Eraut (1994) recommended that theoretical knowledge and pedagogical techniques be linked with the practical side of professional clinical experience. But this ideal proved extremely difficult to implement effectively, particularly because of the constraints within the university credit based systems. Nevertheless responsibility for the academic credit lay with universities and nurse education had to work around that. The responsibility for the

assessment of practical competence however, remained wholly within the NHS, thus in one view “widening the gap between professional educators and their erstwhile professional colleagues” (Eraut, 1994, p.99). It led to the call for nurses to go ‘back to bedpans’, allegations that the emerging nurse was not fit for purpose and not competent and the political momentum behind these suggestions resulted in the then professional body setting the Commission for Nurse Education (UKCC, 1999; Meerabau, 2001). The significance for the debate about competence in nursing and its definition and application intensified and it “moved to centre-stage” when in 1999 the statutory body launched the report ‘Fitness for Practice’ (UKCC, 1999; Watson, 2002, p.476).

The healthcare sector as an employer wanted diplomats or graduates who could enter employment with minimal need for further training (Burnard and Chapman, 1990). Somewhat in contrast, universities aim to equip students with broad generic, transferable knowledge and skills in preparation for embarkation upon a path of lifelong learning (Cowan et al., 2005). For entry to the nursing register the student is required to meet all academic and practice demands in being fit for practice, fit for purpose, fit for award at the point of registration (NMC, 2005). Following its incorporation into academia, the pre-registration nurse curriculum became notoriously ‘top-loaded’ and overcrowded with the infeasible expectation that all the knowledge and skills thought appropriate for a lifetime in the nursing profession could be acquired (Eraut, 1994). Programmes sometimes failed to recognise that different students learn different things at different rates (Piaget, 1981).

3.4 Competence in practice

Dreyfus & Dreyfus (1980) skill acquisition model represented an early engagement with competence and what it means. They described competence as a passage from detached observer (advanced beginner) to an involved performer (competence). During this transition to the competent stage, the practitioner no longer stands outside their professional encounters but becomes fully engaged with them.

Many nurse education programmes structure their practice assessment around Patricia Benner's (1984) proposition concerning the stages of professional competence which she has termed 'Novice to Expert', work predicated on that of Dreyfus and Dreyfus. Competence for Benner is a progressive experience that she calibrates in five distinct stages. These stages are demonstrated and summarised in Table 3.1.

Table 3.1 Summary of Benner (1984) stages from Novice to Expert

Stages	Summary
Novice	No experience of the specific circumstances that have arisen Taught objective attributes Rule governed behaviour to guide performance – limited and inflexible Any nurse entering new setting with no experience
Advanced Beginner	Marginally acceptable performance Limited prioritisation ability – all aspects of work treated separately
Competent	Sees actions in terms of long term goals – contemplates, analyses and plans ahead, copes with multiple activities Lacks the speed and flexibility of the proficient nurse
Proficient	Recognises situations as a whole and plans long term goals. Has learned from experience what to expect and able to prioritise accordingly Can adapt sufficiently to the presenting clinical challenges
Expert	Intuitive, deep tacit understanding Vision of possibilities Analytical in changing clinical circumstances

Within this taxonomy, when nurses have achieved a 'competent' level of performance, they are able to function safely. But as they gain more experience they develop a more holistic and complete awareness. So even the competent nurse has been considered to lack the expertise to handle the total spectrum of challenges that will confront them, something described as follows:

If we can think of a continuum ranging from just knowing how to do something at one end and at the other knowing how to do something very well at the other, competence would fall somewhere in the middle (Pearson, 1984, p.32)

Following the completion of nurse training, Eraut (1994, p.159) argued that “the professional nurse is competent appears to be stating the obvious”. Benner (1984, p.25), however, typifies the competent nurse as having been “on the job or in the same or similar situations for two or three years”. Benner’s hypothesis provokes the very obvious question regarding whether it is possible for the newly qualified nurse to be fully competent? What is not clear from Benner’s assumptions is whether the pre-registration clinical placements would be classed as “on the job” because her work shows little acknowledgement of the notion of transferable skills. Benner did however, publish this conceptual model when the apprentice style of nurse training still existed in some parts of the US where the work was undertaken and where students were expected in their placements to be the backbone of the workforce and were workers first and learners second.

Eraut (1994) contributed to the definition of competence by describing the competent practitioner as “tolerably good but less than expert” (p. 160). In harmony with Benner, Eraut identified that even when a practitioner is considered competent, there is still something more for them to attain beyond which Benner referred to as proficiency and expertise, similarly, Eraut claims the competent professional to be as follows:

A competent professional is no longer a novice or beginner and can be trusted with a degree of responsibility in those areas within the range of his or her competence but has not yet become proficient or expert (Eraut, 1994, p.215)

Competence in everyday practice seems to mean being slightly more than being newly qualified and is only fully achieved once the new nurse has gained the ability to be totally accountable for their professional actions. This

is captured within the statutory position in the UK where unqualified nurses are not intended to practice unsupervised (NMC, 2008a).

It has been postulated that professional qualifications should be designed to indicate that the aspiring professional has completed the initial training, describing qualification as a “rite de passage” that affects their status in society, thus reinforcing Benner’s earlier propositions (Eraut, 1994, p.159). Epstein and Hundert (2002) also add to the competence debate by recognising that competence is a developmental process and that it is these more specific developmental aspects that should be attained at different stages of training or career.

Despite the convoluted discourse about what comprises competence, most professionals hold a clear point of view about what or whom they judge to be ‘incompetent’ (Eraut, 1998). Watson (2002) discussed how we all have an inherent notion of what incompetent practice is and that we know when we see it. For Watson, nurses may be deemed incompetent when they have not gained a sufficiency of experience to consider clinical circumstances holistically and in a way that provides a prioritisation of the care they provide. He further raises the question that because competence is so poorly defined, is what is being considered as competence, “often no more than not being incompetent?” (Watson, 2002, p.477).

3.5 Post-registration education

Successful completion of pre-registration nurse education and gaining the professional registration denotes the formal ‘learning’ stage of a nurse’s career. Having achieved registration marks a significant decline in the amount of time allocated for learning, but should not ideally signify a break in learning process itself. On qualification the new nurse begins employment under supervision, usually through preceptorship programmes designed to continue experiential learning in the work place and thus easing the transition from student to qualified nurse (NMC, 2008b). Preceptorship can be interpreted in many different ways across a variety of clinical environments (Topping et al.,

2010). Some clinical areas have intense periods of induction or lists of competencies for the new nurse to achieve prior to being able to practice unsupervised. Other employers expected that the newly qualified nurse will begin their new role straight away and be totally fit for purpose, requiring minimal supervision or peer support. Although the formal priority of development in nursing is given to pre-registration nurse education years, there is awareness that the pre-registration years are just a beginning and there is a need for continuing professional education (CPE) and CPD (Eraut, 1994).

CPE and CPD are terms often used interchangeably. CPE has been described as the formally organised course, conference or educational event. CPE as an entity has been criticised for its poor integration with clinical practice and ill defined outputs (Eraut, 1994). The empirical evidence about the effectiveness of CPE/CPD and its overall influence on clinical practice is often scanty and frequently it is mainly negative rather than positive in nature (Eraut, 1994). The NMC has however, acknowledged its importance and has provided post-registration education and practice (PREP) standards; a CPD framework designed to provide a high standard of practice and care, although its advice on competence is less that clear because it includes an opt out clause that the PREP standards are “not a guarantee of competence” (NMC, 2010a, p.2).

3.6 Approaches to competence

There have been a variety of different conceptual interpretations of competence in nursing including the behaviourist and generic or holistic approaches. The behaviourist approach to competence focused on tasks and skills. Competence assessment using this method is common to nursing programmes and often relies on direct observation of the student's performance. To achieve overall competence within the behaviourist philosophy depends on the individual achieving a satisfactory level of performance in each component of defined task (Watson et al., 2002; McMullan et al., 2003). This interpretation has been criticised as being

reductionist and to be more concerned about what people can do rather than what they know and of disregarding other key attributes that contribute to nursing care, such as communication and critical judgement. Competence is a normative concept often related to the specifics of what a competent person is able to do in specific circumstances (Eraut, 1994). It is important therefore, to ask not only how competence is defined in general, but how it is defined under specific conditions and circumstances that are part of the nurses role (Eraut, 1994). Nursing embraces a diversity of dimensions that cannot be easily reduced to a mechanistic list of competencies. It encompasses a wide repertoire of skills that change according to the demands of each clinical speciality where nursing care is being carried out and thus is context dependant. Epstein and Hundert (2002) discussed this along with the practitioners 'scope' of competence which must be related to the clinical context in which it occurs. Suffice to say that a nurse may be fully competent within a speciality in which they have worked in for many years yet might have to work in a less familiar environment where their competence might be more dubious. Evidence tells therefore, that it is not adequate to ask only how competence is defined in general but how it is defined in particular contexts (Eraut, 1994).

The holistic approach to competence identifies broad clusters of general attributes which are considered essential for effective performance. These underlying attributes provide the basis for transferable skills in delivering care (McMullan et al., 2003). The holistic slant assesses competence as more than the sum of individual competencies. Attributes of holistic competence include motives, personal interests, perceptiveness, receptivity, maturity and aspects of personal identity (Cowan et al., 2005). Eraut (1994) discussed holistic competence as a generic quality to a person's overall capacity and competency to enable the practitioner to fulfil a role and these attributes are often taken into account within job selection processes and appraisal systems (Epstein and Hundert, 2002).

Two other elements occur in the literature that relate to holistic competence and these are personal and cultural competence (Sørensen, 2009). The development of personal competence requires the practitioner to communicate and to empathise effectively. Cultural competence conveys a nurses' trans-cultural awareness and relates to their being able to adequately managing within the different cultural norms of patients through a sound comprehension of such things as their lifestyles, health beliefs and behaviours (Dreher, 2002).

3.7 Competence in nursing

Competence has always been a principle aspiration within nurse education but how this has been defined and the specificity of that definition has seen a marked transformation in recent years. In 2002, the NMC defined competence as “the skills and ability to practise safely and effectively without the need for direct supervision” (NMC, 2002, p.38). This definition focused on the ‘know how’ and referred to the practical elements required to independently implement nursing care. It provided very little reference to the knowledge base, the ‘knowing that’ or the theoretical underpinning of effective nursing care (Ryle, 1949). Gonczi et al., (1993) described the attributes that make competence as knowledge, skills and attitudes. Hand (2006) advanced this idea reflecting that, having the skill without the underpinning rationale renders the practitioner unsafe. Similarly, having the knowledge but not the skill may lead to incompetence also and all therefore, lead to the conclusion that knowledge and skill in equal measure are prerequisites to informed nursing practice. Hence nursing is not purely about the practice delivery but the knowledge base that underpins it. Ryle (1949) summarised the position describing the ‘knowing that’ and the ‘knowing how’ should be united and applied to ‘process knowledge’. This was later reinforced by Eraut who depicted “knowing how to conduct the various processes that contribute to professional action” (Eraut, 1994, p.107).

Drawing on Watson's (2002) discussions, the theoretical proposition of competence was recognised in detail and within the NMC policy in 2008. It built descriptors into the definition, describing competence as:

A bringing together of general attributes – knowledge, skills and attitudes. Skill without knowledge, understanding and the appropriate attitude does not equate with competent practice. Thus, competence is the skills and ability to practise safely and effectively without the need for direct supervision
(NMC, 2008c, p.3)

In 2010 the NMC published 'Standards for pre-registration nursing education: draft for consultation document'. In it, nurse educators were alerted that new registrants may not be as competent as they might be supposed. In this recent NMC iteration of what comprises competence, the statutory body identified it as: "The combination of skills, knowledge, and attitudes, values and technical abilities that underpin safe and effective nursing practice and interventions" (NMC, 2010b, p.45). This definition extends the work of Gonczi et al. (1993) that conceptualised competence as the bringing together of several attributes in a way that specifically addresses the detailed needs of those undergoing an educational experience for their profession.

In comparison with nursing, the medical profession has been somewhat more emphatic and Epstein and Hundert (2002) identified the medical attitude to competence that was described as follows:

Professional competence is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values and reflection in daily practice for the benefit of the individual and community being served
(Epstein and Hundert, 2002, p. 288)

3.8 Patients' view

The advent of greater patient and public involvement in the NHS in this century has seen reference competence being something on which patients should have a view (Milburn, 2003; Bradshaw 2003). Little empirical work exists from the patients' perspective but Calman (2006) undertook a small-

scale qualitative study with 27 service-users and investigating their views of nurses' competence. They described the foundations of competent nursing practice to be technical care and nursing knowledge. The service-user saw it a priority for these qualities to be demonstrated as a sign of nursing competence. An emphasis by them was also placed on the ability to protect and safe guard patients in their care. Such was the concern for *technical competency* that it surpassed in the respondents estimation, the emphatic and interpersonal skills of the nurse in its ranking of importance.

3.9 Competence descriptors

While competence has a deep traditional place within nurse education, it has been suggested that other descriptors such as 'performance' and 'capability' provide a more sophisticated definition of what should be sought in the qualifying practitioner (Eraut, 1994). Both performance and capability clearly relate to competence and the terms are often used interchangeably and this has been something observed to be semantically confusing (Watson et al., 2002).

Performance is concerned with the demonstrated ability to 'do' something and should be directly observable (Gonczi et al., 1993). Performance may be required to demonstrate competence but the debate whether performance may wholly demonstrate competence remains an unresolved conundrum on which the jury is still out (Eraut, 1998). Underpinning knowledge has been recognised as a significant feature in most definitions of competence, thus, indicating that competence requires the integration of and collaboration between theory and practice (Jarvis et al., 2003). Assessing cognitive processes, by definition, cannot be visually observed and therefore, other mechanisms than the naked eye are required to assess performance and the evaluation of professional practice. Competence is similarly, not directly observable. It therefore, may be only partly inferred from performance (Gonczi, et al., 1993). Consequently, it is argued that the assessment of performance should take place in a natural or near natural setting as required for the job (Eraut, 1994). This raises the challenge to nurse educators that

assignments and examinations demonstrate knowledge and reasoning ability but that they may be capable of only partially assessing clinical performance. So without performance evidence, judgements of competence may be thought unreliable and to lack credibility. Competence therefore, should be the combination and integration of performance and capability. Capability may provide a basis for developing future competence and is concerned with the knowledge and skills to enable performance potential in a wider range of situations than those directly observed. Essentially capability is “knowledge in use” the quality of being “capable is almost synonymous with competence without the normative connotation” (Eraut, 1994, p.208).

3.10 Competence and teaching and learning processes

Using an educational means to develop practitioners' competence in acute care in relation to this study required the creation of teaching and learning strategies along with assessment methods that also enhanced learning. Universities and healthcare organisations strive to develop interesting and effective teaching and learning strategies to meet the needs of the student and their employer. In its rudimentary form, teaching is the way in which one person brings about learning in another (Hinchcliff, 1999; 2004). Within any teaching encounter, the mode of instruction chosen should be aimed at helping the individual learn and develop. Teaching is obviously also, based on the knowledge of 'how people learn'. This ideally should be considered when designing any form of learning encounter (Gagne, 1985). The process for the adult learner aims to provide a positive experience because if it is perceived even remotely, of being one that is negative, it can have adverse effects on student motivation and performance (Struthers et al., 2000).

The literature of the psychology of education of the 1970s and 1980 that was the initial enlightenment in the history of adult learning or andragogy and described learning as a permanent change in behaviour, usually brought about intentionally. The literature of the time also proposed that adults learn differently from children (Knowles, 1984). These ideas impressed nurse educators of the day (Jarvis et al. 2003). What has become more apparent

since is that most health-related professionals learn within three domains that are respectively cognitive, affective and psychomotor (Reece and Walker, 2002). Some contemporary learning philosophies embody these three principles and illustrate that they are capable of synergising each other and that they serve to enrich the role educators should take in implementing teaching and learning strategies. The cognitive domain is recognised to be the means by which the student processes and assimilates factual detail and is usually in CPD courses, delivered in format of the lecture (Hand, 2006). The affective domain involves values, feelings, and emotions, attitudes and beliefs that involve conveying and appreciating professionalism. These aspects often receive less attention than the cognitive domain (Hand, 2006). The psychomotor domain involves the practical development of skills, often through actual practice or simulation.

The way students learn in all of these domains is highly individual in nature. Many practical implications concerning the mature, part-time student restrict the possibility to identify students' individual learning styles in the traditional classroom setting. It is possible however, to maximise learning in a group by varying the learning and teaching tactics and not being confined to the lecture. All students need the opportunity to learn in their preferred style, although they are exposed to different teaching strategies to broaden their learning experience (Bastable, 2003). Traditional approaches to learning and teaching have been critically reviewed and criticised (Coffield et al., 2004). Their work condemned the instruments used to appropriately identify students learning styles and concluded that the most popular of these were 'highly questionable' and had been inadequately validated with independent research to support their recommendations.

The planning stage of the acute illness course content and delivery style was considered and implemented with care. This was not a simple task and it required a creative problem solving process that necessitated synthesis of the many dimensions of the course to apply relevant teaching and learning processes (Eraut, 1994). The course leaders' intentions were to provide

motivating learning experiences that aimed to address the processes in suboptimal care in acute settings that had been identified from the literature (McQuillan et al., 1998; Seward et al., 2003; NCEPOD, 2005). The selected strategies for teaching and learning methods utilised a mixture of the learning tools including the traditional lecture, simulation sessions and individually chosen practice placements, all of which will be fully explained and explored in greater detail within chapter six.

3.11 Assessment strategies

Assessment is a feature of all academic courses leading to an academic award in the United Kingdom (UK) and contains benchmarks that are used to calibrate student achievement. Assessment has been defined as follows:

Assessment in education can be thought of as occurring when one person, in some kind of interaction, direct or indirect, with another, is conscious of obtaining and interpreting information about knowledge and understanding or abilities of that other person. To some extent it is an effort to get to know that person
(Rowntree, 1987, p.56)

The nature of assessment strategies used to assess learning varies a great deal from traditional unseen examinations to student-centred and innovative mechanisms, the latter being the focus of the assessments employed on the course. The rationale for the method of assessment should ideally be relevant and comprehensively test the learning outcomes that have been set for students. Assessment therefore, is a judgement of student learning achievements (Lambert and Lines, 2000; Linn and Gronlund, 2000). Some have argued that assessment is much more than use of a range of techniques to measure achievement but propose that it is:

A systematic process that plays a significant role in effective teaching. It begins with the identification of learning goals and ends with a judgment concerning how well those goals have been attained
(Race et al., 2005, p.29)

Assessment can have positive and negative consequences for the mature student. Some respond positively and may work more effectively as a result of its challenges or its results, whilst others may perceive it as a threat and

become disheartened and lose motivation. The effect on students was a prime consideration in this and it was paramount that diet of assessment be well constructed, fair and tailored for the particular purpose or the course. There is growing evidence that the student's perception of the assessment task is strongly related to their attitude to learning (Stefani 1998; Struyven et al., 2005). In practice and as consequence, the actual mode of assessment may advantage some students who perform well in a particular type of assessment and conversely, disadvantage those who do not. Brown and Knight (1994) argued the use of mixed assessments and multiple techniques are essential for effective assessment practice, thereby avoiding advantaging or disadvantaging any individual student.

Integration and assessment of competence is a greatly debated subject in universities (Barnett, 1994). Pertinent to this study, is the need for assessment to be used as an indication that the student has acquired the necessary application of skills and the underpinning knowledge for performing the key elements of acute professional practice (Welland et al., 2007). The assessment of applied knowledge and skills were an important requirement of the course. The literature has discussed the concerns that exist about the extent to which CPD courses include and assess ongoing clinical competence and how this incorporates progression as the student proceeds through the course and achieves exit velocity (Manley and Garbett, 2000; Watson et al., 2002).

In the past competence in nursing has been assessed through observation of the student in clinical practice however, the key question being, what level of performance is to be demonstrated before the student achieves competence? Watson et al. (2002) reinforce this and concur that the challenge within assessment, given the varied definition of the concept, concerns the selection of assessment tools. The multiple instruments that are used for competence assessment raises the potential issue of each instrument's reliability and validity (Schoene and Kanusky, 2007).

Reliability is determined if an assessment accurately and consistently evaluates the students performance or competence. Reliability also refers to the extent to which the assessment results can be reproduced. This must be considered as a challenge when practical assessment strategies are discussed. For the written assessment to be reliable, it must remain at a consistently acceptable level over time regardless of how many people judge it. An assessment in the clinical setting, however, is a unique and complicated event that lives only in the memories of a mentor and the student being assessed (Nicklin, 1996). Some judgements about professional practice to be reliable and are difficult to justify in concrete terms and this is why student appeals against a judgement of failure is often upheld.

All assessments should be considered carefully in the design and processes required by both the student and by how they relate to the intended learning outcomes. Validity concerning the assessment of competence answers the question; does the particular mode of assessment measure what it set out to measure? This relates naturally to the sensitivity that the strategy has to the particular outcomes that it is attempting to calibrate. This may even be within this process a paradox in this quest for validity whereby the fidelity of the assessment, may result in a reduced demonstration of related performance or capability (Eraut, 1994).

Consideration should also be given to the level and currency of competence of the assessor. Dreyfus and Dreyfus (1980) identified what they termed 'the situational experience premise'. They claim that skilled performance can be partially achieved through principles and theory learned in a classroom but that the critical context-dependant judgement can be acquired only in 'live' clinical practice. Written examinations and essays are only guaranteed to assess knowledge and this type of academic assessment it is argued, can rarely be capable fully of assessing practical competence (Eraut, 1994). The traditional maxim in academia is to specify a pass mark and grading criteria to judge levels of knowledge but this becomes a more thorny issue when the process is used to assess competence. Most institutions consider the

calibration of practice in this to be infeasible and settle for a straight pass or fail decision.

Duffy (2004) also identified that the reliability of the mentors' assessment of competence is also an unresolved matter. A significant number of mentors in Duffy's study were 'failing to fail' student nurses that did not reach the expected level of competence. This was attributed to many factors, but particularly the emotionally and procedurally difficult, pseudo-litigious process required by the mentor if they were to judge the student 'incompetent'.

Strengthening the clinical preparation and assessment processes within nursing, although not a new concept to the profession has more recently seen the development of clinical skills laboratories, the use of simulation of practice and the Objective Simulated Clinical Examination (OSCE). Simulation is becoming recognised as an increasingly more reliable and valid tool to assess clinical competence. It is contended however, that it is performed under artificial conditions which are not always transferable to clinical practice because in the simulated setting there may be fewer extraneous distractions than the clinical setting (Eraut, 1994). So, simulated practice may be thought by some as the 'second best' option for competence assessment purposes. Nevertheless, simulation is particularly useful when in teaching things like clinical assessment and for procedures that may be uncommon, hazardous or costly to set up.

Integrated assessments such as case studies and projects linked to the workplace are thought relevant and valid for the demonstration of knowledge demonstration of clinical practice although, these have been said to limit the discovery of the true extent of what the student really knows (Eraut, 1994). Assessments such as portfolios often comprise a mixture of evidence on both performance and capability (Eraut 1994), although style and structure vary vastly. Portfolios can also be used for exploration and critical analysis of clinical practice but their reliability and validity as assessment tools may be limited. Some portfolios include reflection by the students on their own work

which is more about capability rather than performance (Eraut, 1994). Other portfolios may include specific lists of competencies and/or witness testimonies of competence although then the witness 'assessor status' then requires verification if it is going to mean anything.

All in all, the key to effective assessment is that it is appropriate to the content and style of learning and addresses the learning intentions of the module and is relevant to it (Rowntree, 1987; Burkšaitienė and Teresevičienė, 2007). For instance, an essay or unseen examination for a course that had largely involved practical work in a skills laboratory may be quite inappropriate whereas an OSCE might more appropriately represent students learning outcomes.

Combining different kinds of evidence is thought to significantly improve the reliability of the assessment process (Eraut, 1994). Combinations of types of assessment evidence are needed if both the range of knowledge and its application are to be assessed. This therefore, allows considerable scope for the more imaginative assessment designs that employ innovative as well as traditional methods. The acute illness course employed a variety of assessments aimed at the horizontal integration between the taught modules and the vertical integration between the taught material and practice and vice versa. The tools used, included a portfolio, objective structured clinical examination (OSCE) and 'choice' of assessment, all of which will be discussed in greater detail within chapter seven.

In the past, no compulsory post-registration assessment of RNs' competence in practice was required but in England in 2004, the Government launched an initiative that it called the Knowledge and Skills Framework (KSF) (DH, 2004a). This required all NHS employed non-medical, registered practitioners to demonstrate their ongoing professional updating and their ability to practice by demonstrating this ability against set competencies. Alongside this, the NHS salary structure underwent a major review. All healthcare roles were reassessed and put into different bands according to generic criteria. As a

result, all NHS staff became remunerated according to the 'Agenda for Change' structure that was a notional estimate of a practitioner's salary. The limitations of this in terms of its intentions and its effect on equitable remuneration have been questioned and implementation of these policies have been said to produce "a gap between the intended policy and the actual practice of KSF in the NHS remains unacceptably wide" (Brown et al., 2010, p.131).

3.12 Conclusion

This chapter has sought to demonstrate that the core concern of this study, competence, is a complicated concept with many defining influences and factors. For a RN to be judged competent there needs to be an agreement, not only of what competence is, but what the scope of any statement of competence incorporates. Furthermore, the specification of what criteria define it with precision, still remain something of an obscurity (Eraut, 1994). It is intimated within the literature that we have to live with the general idea of competence but that "we have to make serious efforts to find it, define it and measure it using instruments rigorously tested for validity and reliability" (Watson, 2002, p.479). Suffice to say, that as yet, clinical competence is still lacking a gold standard (Watson et al., 2002).

The expectations of a competent practitioner may be quite varied from being fit to practice and safe, to being fit for purpose to having attributes defined by Benner as that of the expert who has deep understandings, a vision of the possible options and has a well developed analytical ability (Benner, 1984). This means that for students to be competent there need to be a blend of requisite knowledge that they are able to demonstrate through essays and exams, and the necessary skills repertoire that they have gained through actual professional experience, something confirmed repeatedly in the literature (Benner, 1984; Eraut, 1994; Epstein and Hundert, 2002). This view has however, been refuted with claims that educational levels rather than experience was the significant factor that impacted on patient outcomes (Aiken et al., 2003).

It is argued that there is too much professional freedom in defining nursing competence and there is “no agreed consensus by which nurses could judge what they know, what they should know and what they do not know” (Bradshaw, 2000, p.319). The design of the acute illness course was cognisant of this and so employed a pragmatic and what seemed a reasonable definition of competence in the particular clinical context. Reducing suboptimal care was a natural priority and hence the definition of competence applied within this study was adapted from Gonczi (1993). This involves the attributes that expressly address knowledge, skills and attitudes. The underpinning competencies that inform competence in the context of acute care are identified in section 2.3.8, following Wood et al.’s (2004) identified training needs and the competencies articulated and recommended more recently by NICE (2009). Within the remainder of the study therefore, competence will be defined operationally as, ‘the overall ability to effectively and safely manage the patient within the limits of the nurses’ role’.

Chapters two and three explored and analysed the evidence-base relating to the acutely ill patient in hospital and the development of knowledge, skills and competence of the RN caring for this group of patients. Chapter four will present the subsequently developed research questions and this will be followed by a critical exploration of the most appropriate research design and methods to answer these questions.

Chapter Four

The Research Methods

4.1 Introduction

The development and implementation of the acute illness course afforded the opportunity to investigate the local delivery and theoretical perspectives of this new and innovative CPD course in some depth. Chapters two and three have informed and constructed the underpinning theoretical basis of the topic of the research. This chapter therefore, will present the research questions that were to emerge as the means to explore the more detailed workings of the acute illness course. Furthermore, a critical exploration and rationale of what was considered to be the most applicable research methods to answer the research questions will be presented.

For empirical research to successfully address the research questions, test existing theory or create 'new knowledge', it must be securely grounded within an appropriate methodological paradigm (Gillham, 2000). Research methods involve sets of processes and guidelines that identify the focus of the study, differentiating it from other types of inquiry. Research methods derive from the logical or philosophical basis of disciplines and should be adhered to by the researcher through the strict observation of the chosen style (Patton, 2002). There are, however, no rigid rules, guidance or formulae used in applying research methods and no ideal standards exist to execute it (Silverman, 2010).

4.2 Research aims and objectives

This research was focused on the detailed exploration and evaluation of how the acute illness course and its teaching, learning and assessment methods impacted on qualified nurses' competence in acute care settings and the overall aim of the study, was to investigate the influence of CPD on practitioners' clinical practice in the acute care setting.

The more specific research objectives were to investigate and critically analyse:

- i. The profile and motives of recruits to the acute illness course.
- ii. Student perspectives and experiences of the teaching, learning and assessment methods used on the acute illness course.
- iii. How the acute illness course was judged to develop practitioners' skills and competence from the perspectives of former students and those of their managers.
- iv. The influences on nurses' knowledge, skills and competence when managing acutely ill patients.

4.3 The setting for the study

The primary but not exclusive purpose of the School of Human and Health Sciences (SHUMS), nursing and healthcare department within the location where the research was conducted is to provide education to support local healthcare organisations and the majority of students that accessed the acute illness course were employed by two local acute National Health Service (NHS) Trusts. The largest of these had at the time, three hospitals with a total of 7000 staff and provided healthcare for a population of half a million, with 190 emergency admissions each day (Mid Yorkshire NHS Trust, 2009). The second acute Trust comprised of two acute hospitals with a total of 5000 staff, providing healthcare for a local population of 435,000. In 2007/8 the Trust cared for 100,000 inpatients (Calderdale and Huddersfield NHS Foundation Trust, 2009). The SHUMS and these local Trusts had well established relationships and partnership links and the majority, if not all courses are planned jointly to reflect current clinical demands.

4.4 The research method

The express purpose of the acute illness course concerned the enhancement of the students' skills and competence in acute care settings. This required an exploration in a detailed fashion from a variety of perspectives which focused on the subjective experiences of the people involved. Qualitative methods were therefore, thought the most appropriate means to achieve a

comprehensive understanding of the various facets associated with the outcomes of the course. The course was contemporary, innovative and unique in nature and purpose and a case study approach was chosen to provide structure to the work although, the case study could not wholly be, “equated to qualitative ... and the case study can incorporate methods other than qualitative” (Simons, 2009, p.14).

This study was not intended to be an educational evaluation of the acute illness course in its purest sense although quality assurance data were collected along with recruitment statistics on completion of each cohort for basic evaluative purposes. Evaluations, according to Simons (2009) are primarily experimental in nature and often use quantitative indices to demonstrate a course’s relative effectiveness. This type of evaluative design, although capable of rigour, was judged not to be able to fully capture the density and essential detail of the programme and its operation. An evaluative case study was thus employed to examine this particular programme in greater depth and detail through the use of several integrated, qualitative research strategies. The study is perhaps best described as ‘educational evaluation using a case study approach’. The following sections will explore this in more detail and will provide an explanation concerning the rationale for and use of the evaluative case study using qualitative research strategies.

4.5 Case study technique

The case study is a well established research technique within the social scientific tradition. It has also been used successfully in a wide range of professions, for example in those of law, biochemistry psychology, sociology and political science and more recently in educational research (Merriam, 1988; Stake, 1995; Robson, 2002; Yin, 2003; Bassey, 2009; Simons, 2009). The case study has been defined as an empirical inquiry and as a device that “investigates a contemporary phenomenon within its real life context, especially when the boundaries between the phenomenon and context are not clearly evident” (Yin, 2003, p.14).

The case study in this instance attempted to reap detailed insight into the participants' experiences and perspectives and this offered an opportunity to gain a comprehensive understanding of the course. Previously, only superficial or anecdotal evaluative evidence existed and this work permitted a study that would provide clearer understanding of this contemporary programme and its associated theoretical and practical phenomena (Travers, 2001).

The strength of the case study has been claimed to be its attention to the subtlety and intricacy of the case (Bassey, 2009). This allows the nuances and nature of the case to be investigated in the real life context, as opposed to the contrived and restricted contexts of a survey or experiment (Yin, 2003). This technique allows interpretation and observation of events in, or about, the natural social conditions (Simons, 2009). Case study research in educational contexts also serves to inform practice and assists judgements that contribute to the improvement in course planning and delivery (Bassey, 2009).

The technique is classed, according to Simons (2009), as a study of the singular, the unique, and the primary focus here is the particularity and the uniqueness of that single case. Different types of case study exist ranging from individual studies that provide detailed accounts of one person in a specific context, to sets of studies that may focus on a small number of individuals with features in common (Robson, 2002). A case study is therefore, about a singularity or a particular event rather than a general event and the 'case' can be virtually anything (Robson, 2002; Yin, 2003). The 'case' is not always necessarily focused on individuals and it may be a centre on an innovation, a service or many other things, examples of which include for the medical profession the use of a particular drug use or the treatment of a particular disease. In addition, social group studies may explore families or occupational groups. Case studies of events or roles may also investigate stereotypes such as nurse-patient relationships. Within the technique, the case (or a small number of cases) is studied in detail using whatever research strategy is thought appropriate to elicit the most relevant information (Punch, 1998). In

any given study the researcher concentrates on 'the one', to which they are able to probe and analyse the diverse and multifarious phenomena it embraces (Bassey, 2009).

4.5.1 Case study in education

In education, qualitative case studies are believed to be an apt research tool for exploring aspects of educational practice, thereby enabling researchers to make considered opinions based on actual circumstances by investigating "instances in action" (Merriam, 1988, p.8). The case study has been widely accepted in education for evaluating multidimensional programmes and innovations in specific contexts and social and educational phenomena in general (Stake, 1995; Simons, 2009). The case study in education can also focus on educational actions or consequences of educational decisions to provide information about programmes of education that are rich in detail in comparison to traditional restrictive, measured evaluative processes (Bassey, 2009). For the most part in education, the concentration of the case study is not about the programme but about the people and with a particular interest in how they function. In evaluative terms, the results of the case study in education generally, link the programme's implementation to its effects on its participants and others with a vested interest in its success (Yin, 2003). It seeks to identify practical outcomes that are communicated in the natural language of the participants, allowing the findings to impact on future policy and practice and it gives the researchers the freedom to explore the holistic attributes of the overall endeavour (Yin, 2003; Simons, 2009).

It is contended that specificity and boundaries are the main features of a case (Stake, 1995). The case is bounded by the research questions asked that are posed and the data sources are used in the specific settings and with persons that were involved. This study evolved from a fascination about the effects of the course and resulted in the exploration of the uniqueness of its content and delivery, but most importantly the influence it had in acute care practices.

The case study accommodates the investigation of the non-routine along with the many phenomena that are of interest and can call upon multiple sources of evidence. It has been described as follows:

It copes with the technically distinctive situation in which there will be many more variables of interest than data points ... and as another result, benefits from the prior development of theoretical propositions to guide data collection and analysis
(Yin, 2009, p.46)

The case study does not necessarily have to follow a formal plan and can be used to support the continuous interaction between the theoretical propositions being studied and the data being collected (Stake, 1995). This provided the opportunity to take advantage and explore data or emerging avenues that are unexpected. Merriam (1988, p.16) portrayed the case study as a research device that is “descriptive and heuristic and relies heavily on inductive reasoning in handling multiple data sources”. A particular danger however, is that the mass of qualitative data collected has the potential to distort the view of subsequent findings and conclusions (Simons, 2009).

4.6 Qualitative approaches

Qualitative research is not linked to one specific methodological doctrine. It involves an interpretative, naturalistic approach to its subject matter which attempts to interpret phenomena in terms of meanings that the participants bring to them (Denzin and Lincoln, 1994). Qualitative research can use a variety of styles which work on the principle of methodological appropriateness of how these methods ‘fit’ the questions asked by the research (Patton, 2002). Munhall (2001) discussed the strengths of qualitative research as involving broadly stated questions that explore human experiences and realities. The human experience is a clear feature of qualitative research and it is often studied through contact with research participants in and on their normal environment, focusing on the holistic understanding of something or someone within their natural context (Black, 1994; Parahoo, 2006; Silverman, 2010). Qualitative mechanisms produce rich, descriptive data, thus assisting the

researcher to understand the participants' experiences and recognising the intricacies and uniqueness of human nature.

By contrast positivist research adopts a different perspective to qualitative researchers. Positivists believe that only observable and verifiable phenomena can be the subject of science, thus excluding subjective or unverifiable theories (Gillham, 2000). Positivist research is related to the 'real world' being independent of people's perceptions of it and the social world is revealed to us, not constructed by us (Denzin and Lincoln, 1994). The position has also been summarised as follows:

Positivists often perceive qualitative approaches as unscientific, soft scholarship exploratory, overly subjective and biased, and as an assault on the scientific method that undermines the achievements of western civilisation
(Miller & Brewer, 2003, p.236)

Barkway (2001) discussed how qualitative research suffers from varied misunderstandings of its nature and purpose, particularly within the 'objective' and 'subjective' understanding of the individuals' experience, thus leading to potential confusion in its interpretation. Crotty (1998) deliberated how some versions of nursing research lacks both the 'note of objectivity' and the 'exercise in critique' that should characterise inquiry. He continued to argue that types of nursing research are obsessed with gathering the subjective meanings attached to the everyday, lived experience of individuals. So the qualitative researcher tends to become subjectively immersed in the subject matter. Subjective data is a fundamental part of the case and "it is through the analysis and interpretation of how people think, feel and act that many of the insights and understandings of a case are gained" and this is reflected in data collection techniques that are commonly used in qualitative case studies such as interview, observation or document analysis (Simons, 2009 p.4). Interviews were used in this case study and will be discussed in more detail later in the chapter.

4.7 Types of case study

One view is that there are principal types of case study that have been differentiated as 'Intrinsic, Instrumental and Collective' (Stake, 1995, p.3). This categorisation means that the three types can employ different methodological strategies according to the purpose for which the study is intended. The 'intrinsic' case study focuses specifically on the interest in the case itself. The 'instrumental' case study is chosen to explore a problem or a research question to provide insight or understanding to something other than the case. The 'collective' approach involves the use of several cases being studied to form a collective understanding.

Another taxonomy emerges from the literature comprising case studies: Explanatory, descriptive, illustrative, exploratory and meta-evaluation (Yin, 2003, p.15). The most important within this account is the express attempt to 'explain' the causal links in real life cases that are too convoluted to be accessible to techniques such as the survey or questionnaire.

Bassey (2009) synthesised the various classification specifically for the purposes of case studies within the field of education. This defined three key types, all of which may contribute to theoretical understandings that underpin both educational practice and policy:

1. Theory-seeking and theory-testing case studies. This category of case study relates to Stake's (1995) instrumental case study, and Yin's (2003) explanatory and exploratory case studies. The focus is to explore a problem or theory rather than the case itself. This type of case study is used as a means to explore or explain theory and cultivate what Bassey terms "fuzzy generalisations" (Bassey, 2009, p. 62). Fuzzy generalisations will be explored later in the chapter.

2. Story-telling and picture drawing case studies. This category is similar to Stake's (1995) intrinsic and Yin's (2003) descriptive category. Story-telling and picture-drawing studies predominantly provide narrative or

discursive, descriptive accounts, exploring and analysing the case and providing theoretical insight as a claim to knowledge.

3. Evaluation case studies. These explore an educational programme and focus on its value and gains insight into whether the required outcomes or objectives have been achieved. This variety draws on theoretical propositions but the sense in which they are different from the others is that they are not specifically designed to generate theory.

On first impressions it seems that the case study of the acute illness course would lend itself to evaluative case study although, the literature is clear that there is no need to stick slavishly to one category and an amalgam of them is permissible (Stake, 1995; Bassey, 2009). A researcher using the case study genre may act as a theoretician at one stage and an evaluator at another. It has been said that the educational case study is a “prime strategy for developing educational theory which illuminates educational policy and enhances educational practice” (Bassey, 2009, p.57)

4.8. Multiple sources

Employing multiple sources or methods in a mutually complimentary way is commonly known as triangulation (Begley, 1996). Triangulation is a major strength for conducting case studies producing data which is more likely to be confirmed or validated as a result of this process (Yin, 2009). The case study relies on multiple sources of evidence, valuing various perspectives, allowing data to coalesce in a triangulating fashion and thereby increasing the way the case is highlighted from different angles or perspectives (Holloway and Wheeler, 2002; Yin, 2009). The goals of triangulation are to collect data from different observational sources and to converge and create a set of findings. Triangulation involves cross-checking data for relevance and significance therefore, testing and challenging findings and arguments posed (Simons, 2009).

There are different modes in which triangulation can be conducted (Denzin and Lincoln, 1994). These include 'investigator' triangulation, which involves using more than one researcher. 'Methodological' triangulation applies when more than one research method has been used. Within this study 'data' triangulation was applied because more than one group of data source was examined. Throughout the investigation comparison of the data from all phases took place to facilitate the triangulation process along with constant comparison with the literature which improved the study's explanatory power (Yin, 2003).

Multiple sources have been defined as "evidence from two or more sources" (Yin, 2003, p.83). The sources are often stakeholders and/or participants highly involved in the case being studied and so the case can portray how they build and experience their world (Simons, 2009). This enables the case or programme story to be responsive to the concrete questions identified by stakeholders and participants as these emerge throughout the progress of the research (Stake, 1995). When planning the study, detailed consideration was given to further multiples of methodological triangulations. Initially the data collection method considered was researcher observation of the former students in practice when caring for acutely ill patients. Practically, however, this method of data collection was judged infeasible due to the large amount of time that would be required to observe a reasonable number of practitioners and to undertake a pre-course and post-course view of their performance. Another consideration was the unpredictable and unplanned nature of acute care the ethical dilemma about what should be done is a student performed suboptimally.

Within the study therefore, the former students were considered to be the most appropriate 'participants' to 'tell the story' and narrate their academic and professional experiences in relation to the context in which they work. The decision to use case study research allowed the opportunity to explore local requirements as well as investigate and evaluate in a detailed way how the acute illness course was implemented. Further key 'stakeholders' with the relevant experiences to inform the case study and with a distinct vested

interest on the outcomes of the acute illness course, were the former students' managers. The managers were in a position to oversee the former student's development and provide feedback on the course content and produce a view on how the course may have influenced the former students' practice. Other data sources were considered including such as patients views. For ethical and practical reasons of sampling, along with potential threat to the quality, depth and relevance of responses, this option was discounted.

4.9 Generalisability

A concern about the case study was the potential it might hold for the more generalisation of the findings. Qualitative techniques have a tendency to focus upon the 'subjective' description of phenomena, thus presenting data analysis that may not be reproducible by others (Barkway, 2001). Yin (2003) debated whether it is possible to generalise from a single case. Within this particular case study, generalisability was not considered an overall goal rather, that the focus should be given to the explanation of the theoretical understanding and the relevance of this to the acute illness course. Stake (1995) identified however, that 'case' studies may be explored, in-depth and at length and that certain responses and findings will come up again and again, to allow generalisations to be drawn beyond the specific setting that was studied. This may be considered as the development of the theory which helps in the understanding of other similar cases that are sometimes referred to as analytical or theoretical generalisation (Robson, 2002). Bassey (2009) identified the output from case studies of singularities can be described as 'fuzzy generalisation' from which generalisations found in the singularity may be possible. This perspective means that fuzzy generalisation, coupled with coherent reports, can be a valuable way of what has been described as "bringing education research findings into professional discourse" which in turn can influence teaching practice and policy (Bassey, 2009, p.57). Caution on the basis of the single case is clearly called for and every effort should be made to avoid unwarranted claims about the generalisability of the findings (Yin, 2003). This has been stated yet more emphatically as follows:

Generalisation ... should be reserved for surveys ... (and) what can be analysed instead is how the research demonstrates that the analysis relates to things beyond the material in hand ... extrapolation better captures the typical procedure in qualitative research (Alasuurtari, 1995, p.156)

4.10 Ethics

The overall aim of the ethical principles existing in this study was to avoid harm for both the participants and the researcher. Efforts were made to ensure fully informed consent was obtained from all participants therefore, avoiding any unintentional deception and maintaining the respect and privacy for all involved at all times (Gray, 2009). It has been said that “people have the right to self-determination and to treatment as autonomous agents, thus they have the freedom to participate or not participate in research” (Lobiono-Wood and Haber, 2006, p.299). Throughout the study, from the initial idea to the writing of the final report, ethical dilemmas were acknowledged and addressed as a means of strengthening the veracity of the work. Research is a leap of faith and it is not entirely predictable how data collection might affect the individual respondent. Superficially however, it seemed reasonable to assume this to be a relatively innocuous process and given the safeguards, that no one would be harmed. Notwithstanding this and by the very nature of the nursing profession, asking respondents to recount traumatic events from their clinical practice could pose a psychological risk and on this basis a counsellor was available if required, although this was never needed.

Data collection involving practicing RNs required that the research proposal be approved by University and NHS research ethics committees. Ethical approval for the study was initially gained through the local University Research Office and Human and Health Sciences Research Ethics Panel (SREP) (Appendix five). The NHS Research Ethics Committee (REC) granted approval. Further approval from the associated NHS Trusts' Research Departments was also gained prior to the interviews taking place and I was given an honorary contract to access and to undertake the data collection on both hospital sites (Appendix six).

To ensure that ethical considerations received the necessary consideration, students and their managers were all invited in writing to participate in the study. Information sheets were provided that discussed the nature, purpose and methods of the study. Informed consent was required before any part of the data collection commenced (Appendix seven). The participants were made aware of their right to withdraw from the study at anytime without any consequences for them.

Confidentiality, privacy and dignity were observed. Yet anonymity can only be guaranteed by using a questionnaire or a non-contact method of data collection which allows no personal contact with the respondent. Anonymity is however, believed not to demonstrate any consistent affects on the quality of a studies response rate (McColl et al., 2001). As the respondents were RNs, complete confidentiality could not be promised if some of the information provided fell outside the Nursing Professional Code (NMC, 2008a). For example, if the participant discussed the harming of a patient, or any aspects of practice that might affect public safety, this would then have had to be reported to the regulatory body and this was clarified for the participants. No untoward professional behaviour, however, was mentioned during the study and every attempt was made to maintain confidentiality throughout. All data collected in the form of electronic verbal records were password protected. Written field notes were securely stored. All materials that may identify participants were safely disposed of by deletion and shredding on completion of the study.

4.11 Validity

The alleged lack of rigour of the case study is a concern for some. Yin (2003) who is generally an advocate has also argued that case study researcher have often adopted non-systematic procedures or allowed equivocal evidence or biased views to influence the direction of their data, findings and conclusions. Potential threats to the validity of this study were considered in relation to

Lincoln and Guba's (1985) three evaluative criteria that are reactivity, respondent biases and researcher bias.

Reactivity captures the way in which the researcher's involvement may have bearing on the case and especially so, through influencing participants responses. Respondent bias could present in different ways ranging from obstructiveness and the withholding information to the opposite, where the participant tries to please the researcher by giving the responses that the participant thinks that the researcher wants to hear. Researcher bias relates to the assumptions and preconceptions of the researcher. In this case, the researcher was the main instrument used to gather, interpret and report on the data. The significance of this as in most qualitative methods is the influence of 'self' and the transparency of the researcher's unperceived effect on the study outcomes (Simons, 2009). To reduce some element of bias, the researcher must attempt be open to the contradiction of pre-conceived opinions (Yin, 2003). This case study clearly acknowledged and valued the researchers place in the process rather than trying to disguise it as some methodologies may do (Bryar, 2000).

Methods to reduce threats to validity were addressed using a reflexive process (Robson, 2002). A rigorous exploration of how my values as the researcher had influence was considered carefully when planning and implementing the study. The significant ingredient was to openly acknowledge was that I was one of the lecturers leading the acute illness course. To maintain as much transparency as possible the academic supervisor closely monitored all stages of the process. In addition, for verification purposes, verbatim copies of completed transcripts were offered to the participants who were asked if they would like to verify, change or omit any content prior to the data analysis.

4.12 The Stages of the study

4.12.1 Sampling

In addition to decisions about the appropriate questions and methods to use in this study, choices were required regarding suitable people to interview to gain relevant data. Qualitative enquiries using the case study approach typically use relatively small samples. Where studies are small all key 'actors' may be invited, thus reducing the ability to generalise the entire population of staff in acute care (Simons, 2009). This method though, does permit an in-depth exploration through access to participants who have understandings and personal knowledge of the related phenomenon (Patton, 2002; Holloway and Wheeler, 2002).

Purposive sampling was adopted within the study and this line of enquiry required critical thought about the parameters of the population being studied to secure an appropriate sample (Silverman, 2010). 'Good informants', according to Holloway and Wheeler (2002), must be willing to critically examine and share their experiences. The RN respondents were only invited after they had successfully completed the programme to reduce any hint of coercion arising from their relationship with me as their lecturer and also the researcher.

The former students' managers were invited to be involved in the study following informed and documented consent from the former student in their employment. A slight hindrance with managers was staff turnover which restricted the size of this sample group. All the participants had to be employed by one of the two NHS Trusts that had granted ethical approval and of the former student participants, all except one were eligible to participate in the study. The aim was to interview approximately 20 to 25 former students, or cease interviews when data saturation had occurred. The intended manager interview sample included approximately 15 former students' managers and again, interviewing would be discontinued once data saturation had been reached. This method made no attempt to use a comparison group

or use random sampling of populations, rather to involve key stakeholders with appropriate experiences to gain suitable data.

4.12.2 Phase one

Following the literature review, phase one comprised of the face to face interview with former students who were invited to participate in the study. The questions put to them during the semi-structured interviews were compiled following critical analysis of the literature which, in turn, supported the study's aims and objectives. The interviews were semi-structured and this permitted a focus on the questions but allowed the participants to raise any other elements that they felt relevant, adding strength to the nature of their own perspective. The interview schedule can be found in Appendix eight.

4.12.3 Phase two

The structure of the managers' interviews focused on themes derived from the initial data analysis that emerged from phase one. The interviews with the managers centred on the course and managers perspectives and any changes in practice as a result of it. Further observations were sought on any influences on acute care in general. The data analysis commenced and continued as a continual process as the study progressed and as the data accumulated. Former students and managers' data were compared and as themes started to emerge, a constant exploration of the literature and further comparisons were made between it and the emerging findings. This intended to cross-check the relevance or tested out arguments that were accruing from the study and its resonance with the literature as a means of strengthening velocity of the results coming from the study (Simons, 2009).

4.13 Data collection

The meaning and inferences within the interview data were generated through transparent discussion and the reflections of the participants' perception of the acute illness course. An exploration of the influences and any related experiences during and following the course also occurred. Flexibility was allowed to discuss other topics if thought appropriate by the participants. To

address the research aims and objectives and to pose research questions the following were considered:

- A review of the biographical profiles of practitioners who had undertaken the course and their motives for undertaking it, factors that were probed included whether they were doing the course to work towards a degree or to more specifically to increase their current level of clinical practice.
- The teaching, learning and assessment of the course used an eclectic mix of strategies and the data from the participants were analysed regarding their appropriateness in developing their clinical competence. An investigation of how the student experience was thought to have improved the practitioners' skills and competence was undertaken by exploring the participants' perspectives on the effectiveness of their care of acutely ill patients on their ward/unit. The invitation to give examples was included to add for verification and illumination on what the course was achieving.
- An exploration of former students and managers' perceptions of the course and CPD learning and their application to Agenda for Change and the Knowledge and Skills Framework (DH 2004a).

The aim was that all the interviews would be conducted with relative informality employing a conversational style. It has been claimed that "Qualitative inquiry, strategically philosophically and therefore methodologically aims to minimise the imposition of predetermined responses when gathering data" (Patton, 2002, p.295). Open-ended questions and probes were used in the interview that aimed to yield in-depth responses about people's experiences. The data collected was often subjective in nature and comprised the opinions, feelings and knowledge of the respondents involved. Confirming that the participant was practicing what they claim to be practicing is an aid to improve the rigour of the study of this kind and in attempt to address this during the interviews narratives stories were elicited to confirm the respondents' claims in more detail (Spradley, 1979). Encouraging conversations and manipulating questions to promote elaboration on the

subject matter of the discussion were used. It was however, important to ensure that the focus retained its relevance and did not degenerate into a general chit chat. A general interview guide used a semi-structured method and intended to give broad structure to the interview. When considering the sequencing of the questions, it has been said that there is “no recipe to sequencing can or should exist” (Patton, 2002, p.352). In this work it is suggested that interviews should begin with non-controversial behaviours, minimal recall and interpretation and easy to answer questions (Patton, 2002). The interview guide thus increased the comprehensiveness of the data and permitted a systematic data collection to occur and this is discussed later in the chapter.

A consultation and piloting of the interview guide and interview questions was sent to six experienced academic staff and the academic supervisor. Several constructive comments were received. For example, the method of access to participants and questions on the validity of the process were raised and resulted in some modification of the guide prior to using it.

Gray (2009) identified the skill and technique was required by the interviewer to enhance the quality of interview data. No less important however, should be the genuine interest in the perspectives of the interviewee. In this case, knowing the participants in the lecturer/student capacity, probably added more extensive and richer responses to that which might be obtained by an impartial interviewer who is inexperienced in the subject area. At the start of the interview, a rapport was re-established with the participants by recognising that their attendance was greatly valued but nevertheless, remaining neutral and providing empathy and understanding and by being non-judgemental. Respondents were encouraged to talk descriptively and then once they had overcome any initial apprehension, their experiences, opinions and feelings flowed and were more explicit and well grounded. It is advised that recall of knowledge and skill is much more effective and less challenging if it has a real context with which to relate (Gray, 2009). During each interview, encouraging

verbal prompts were used to attract detail to clarify and validate conversations and discussions.

The method of gathering the data employed in this study was digital recording. Cormack (2000) endorsed this method although, Lincoln and Guba (1985) suggested it could disrupt and intrude on the interview by inhibiting a more natural response. This could not be avoided if the interviewee felt uncomfortable when being confronted by a recording machine. The participants were however, given the option to have the recording stopped at any stage to give them some control of the encounter but in practice, participants soon overcame any reticence and talked with uninhibited freedom. To enable the interview to come to a natural close, the final or closing questions were handed over to the interviewee, again affording them some control over the process and allowing them opportunity to add anything that had not already been addressed.

An essential requirement of the case study is that a sufficient amount of data is collected to enable a thorough exploration and interpretation of significant features of the case (Bassey, 2009). The decision to stop data collection, in this case, was made once saturation was observed. This occurred when interviewees discussed the same or similar information to their predecessors and less new information was emerging. The total sample for this study was 25 former students and 14 managers.

4.14 Data analysis

Data management is an often prescriptive and systematic process for most quantitative research. Quantitative researchers manage work in terms of systematic data sets, the documentation of defined variables and so on. The systematic data analysis and management procedures are just as important for the qualitative researcher in order to maintain an audit trail of the typically challenging data analysis because of the large amounts of data generated from, in this case, interviews. The process followed has been described as follows:

Analysis of any kind involves a way of thinking. It refers to the systematic examination of something to determine its parts, the relationship among parts and their relationship to the whole (Spradley, 1979, p.92)

The qualitative data analysis stage required structured organisation, clear documentation and subsequently division of the data into manageable units. This enabled synthesise and the identification of themes and patterns of importance in relation to what was being learned (Hoepfl, 1997). The data analysis process involved transcribing the interviews, reducing the large volume of raw information, sifting the trivial from significance, identifying salient patterns, and constructing a framework for communicating the principles of what the data had exposed. Each qualitative study is unique, and therefore, the analytical apparatus it uses will also be unique to the study (Miles & Huberman, 1994). The so called “human effect” is the “greatest strength and yet the fundamental weakness of any qualitative enquiry and analysis” (Patton, 2002, p.433). Many computer packages are now available to assist the analysis of qualitative data. These computer assisted qualitative data analysis software (CAQDAS) have developed to today’s technological standards, NVivo 7, was the CAQDAS used for this study.

CAQDAS assist with data analysis but do not actually analyse the written data following transcription. The software facilitates the storage, coding, retrieval and comparison of data but the researcher is still the person who actually undertakes the analysis. CAQDAS speed up the process of locating the coded themes and grouping the data together in categories. As the researcher and data analyst, I was the person that determined what patterns had been formed and once these patterns had been aggregated, a theme resulted and was given a title to give it meaning. When exploring data analysis procedures that enable transformation of data into meaningful findings, which is the important end point but, to do this it is said that, “no formula exists, guidance, yes but no recipe” (Patton, 2002, p.114). Yet Morse and Field (2002) suggested four distinct processes are required for the structured analysis of qualitative data. These included comprehending, synthesising,

theorising and reconceptualising. This work provided guidance yet the final decision on interpretation of data remains unique for the inquirer and no two researchers can assimilate the incoming data in the same way.

Within this study, the data was read many times, impressions and ideas were written down, possible themes were identified with an attempt to interpret the data, progressing to the stages of comprehension and synthesis. Following manual review of the transcripts and the field notes, data were transferred to the NVivo7. To try to reduce the subjective effect NVivo7 provided a clear audit trail of when and how each section was coded. This was useful to verify any findings and gain understanding of decisions, choices and insights. It was important to be able to report at what time and for what reason any changes occurred, thus providing increased rigour to the process.

The aim of the data analysis was to transform and interpret the data from the transcripts into findings, generating patterns and themes. The challenge was to manage the massive amounts of raw data that required reducing to identify significant patterns and construct a framework for communicating the essence of what the data revealed. This enabled the theorising and reconceptualising stages of data analysis to take place (Morse and Field, 2002). Suffice to say, this task would have been even more onerous if it had been undertaken manually. The overall challenge here has been posed succinctly as “we have few agreed-on-canons for qualitative data analysis, in the sense of shared ground rules for drawing conclusions and verifying their sturdiness” Miles and Huberman (1994, p.49). The NVivo package supported coding with free nodes and tree nodes. Free nodes create a folder for ‘one off’ categories, tree nodes enabled the creation of subfolders of a key subject and then subcategories were able to be added. Table 4.1 presents the alphabetised tree nodes and their subcategories from this study. Appendix nine presents the actual NVivo computer screen view of the free nodes and tree nodes and the related subcategories.

Table 4.1: Tree and free nodes developed following data analysis

Tree Nodes	Subcategories
Assessment	Academic level; Achievement; Choice; Comfort zones; Essay; Portfolio; Practical Exam; Practice Related; Presentation
Clinical Background	Acute Elderly; Clinical Experience; CCU; ICU; Medical; MAU; New Job; Surgery; Theatre
Development	Academic development; Assessment in Practice; Competence Building; Confidence; Practice Development
Improvement to Acute Illness Course	The course
Managers Perspective	Student Development
Motives to do course	Further studies
Standards in Care	Acute Care v General Wards; Bed pressures; Knowledge; Staffing Levels; Them and us
Study Leave	Staff development
Teaching & Learning Methods	Alternative placements; Class size; Group discussions; Lecture; Self directed
Simulation	Emotion
Free Nodes	Improvement to CPD KSF Multidisciplinary Policies Study/Work Pressure

On reading the transcripts, boundaries to the nodes overlapped in some participants' evidence and following reflection on this, these were changed or renamed if appropriate. Sentences or paragraphs were highlighted and transferred into the nodes and caution exercised to prevent misinterpretation or loss of context when data was transferred from transcripts to nodes. The

majority of the transporting of the data was exported in paragraphs in an attempt not to lose the context. To make sense of a single line of a transcript or sentences in isolation from the surrounding discussion, can be one of the most common errors that can occur during interview data analysis (Silverman, 2005).

For confidentiality purposes all names in the report were changed, for clarity the former students' names were changed to begin with 'S' and all managers begin with 'M'. For example all quotes by Samantha or Sarah are former student quotes, quotes from the names Mary or Martha are direct quotes for managers' interviews. When collating and analysing the data for the case study report, there was a continuous interaction between theoretical propositions that led to the case study and the data being studied (Miles and Huberman, 1994; Yin, 2003). A case study report should be 'issue' focused and comprise of interview data and written in the language of the participants that allows access to the case study findings that are intended for informed action (Simons, 2009).

4.15 Summary

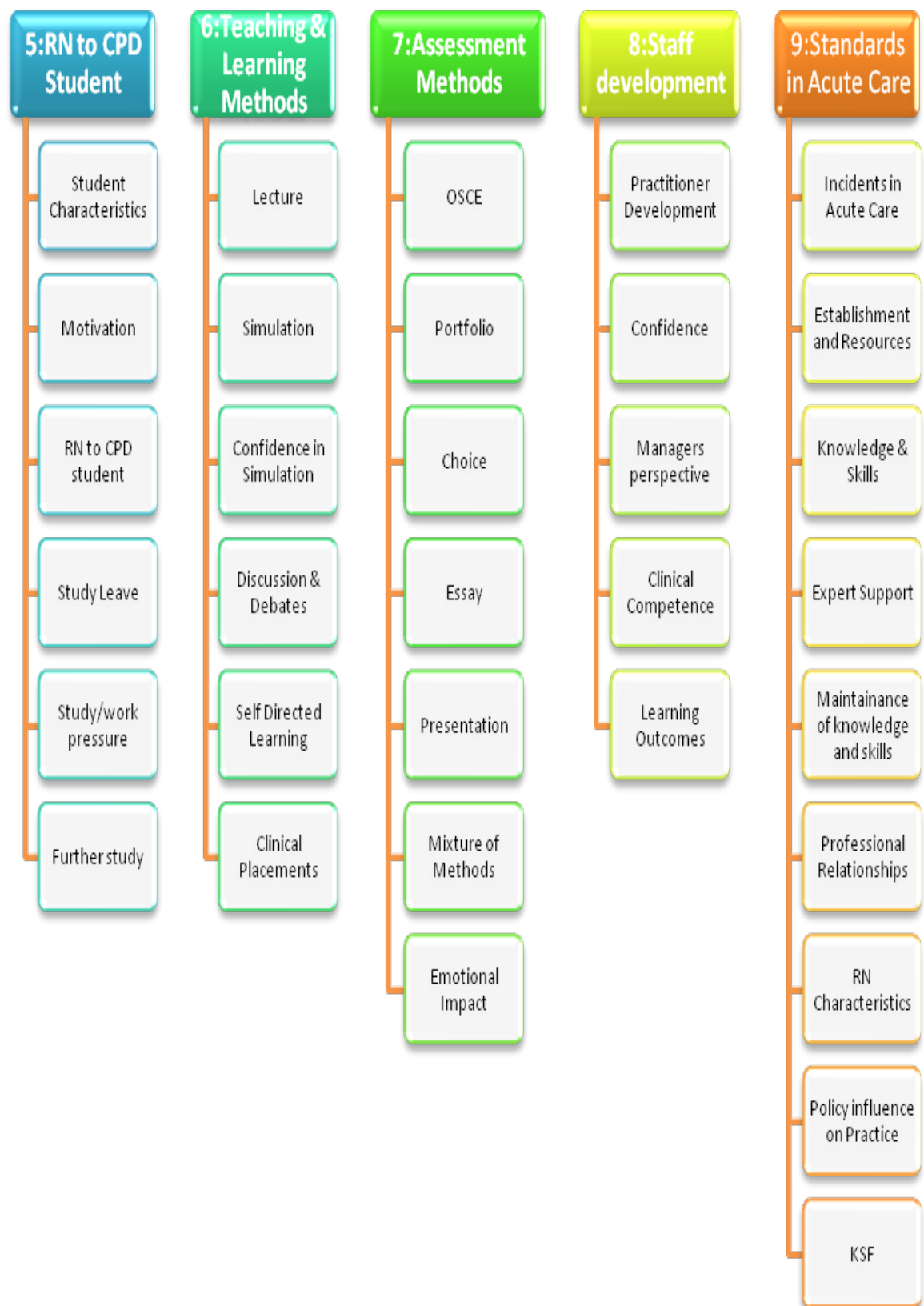
When considering a research methodology, there can be no perfect research design that specifically meets the needs of the intended exercise and there will always be some necessary tradeoffs to accommodate constraints such as limited resources and limited time. The quantitative/qualitative debate can also necessitate a trade off between the possible depth and breadth of a study. The qualitative methods used in this study allowed enquiry into the matters of concern that was in-depth, permitted attention to detail and accommodated context and nuance of acute care practice. Whereas, a quantitative study would have allowed standardised questions to be asked, it would have limited the breadth and depth of the responses to pre-determined categories. The reality being summarised as follows, "Not everything that can be counted counts and not everything that counts can be counted" (Albert Einstein cited in Patton, 2002, p.12).

To explore the unique and the distinctive nature of the acute illness course and its associated concepts, an evaluative case study method was chosen. This technique allowed the opportunity to explore the diverse variables and themes related to the subject area within the full knowledge that ultimately, the value and outcome that this CPD programme could only be measured by its influence on the practitioners' clinical practice and the avoidance of suboptimal care. The educational case study approach provided a platform to probe and enquire into the detailed educational workings of the educational programme that in turn, might usefully inform both of educational practice and policy. The case study permitted elements of flexibility to explore unexpected emerging themes. It unashamedly afforded little generalisability and transferability because of the local nature of the study although, some characteristics and features of its findings and conclusions may inform to other similar programmes and settings.

The case study researcher using qualitative methods ideally should implement systems to ensure rigour to ensure that the research findings are reliable and trustworthy (Guba, 1981). In this study, peer examination processes, reflexivity and triangulation were applied to provide a credible, creative and original means to the development of new knowledge. This enabled the generation of original findings to inform the evidence-base that exists to energise education practice and inform healthcare practices (McGloin, 2008).

The research methods have been discussed and analysed in detail. The following chapters will proceed to present the findings and the theoretical discussions that arises. The subsequent major themes will be presented as the following individual chapters with the inclusion of subthemes identified in figure 4.1.

Figure 4.1 Chapter titles and subheadings



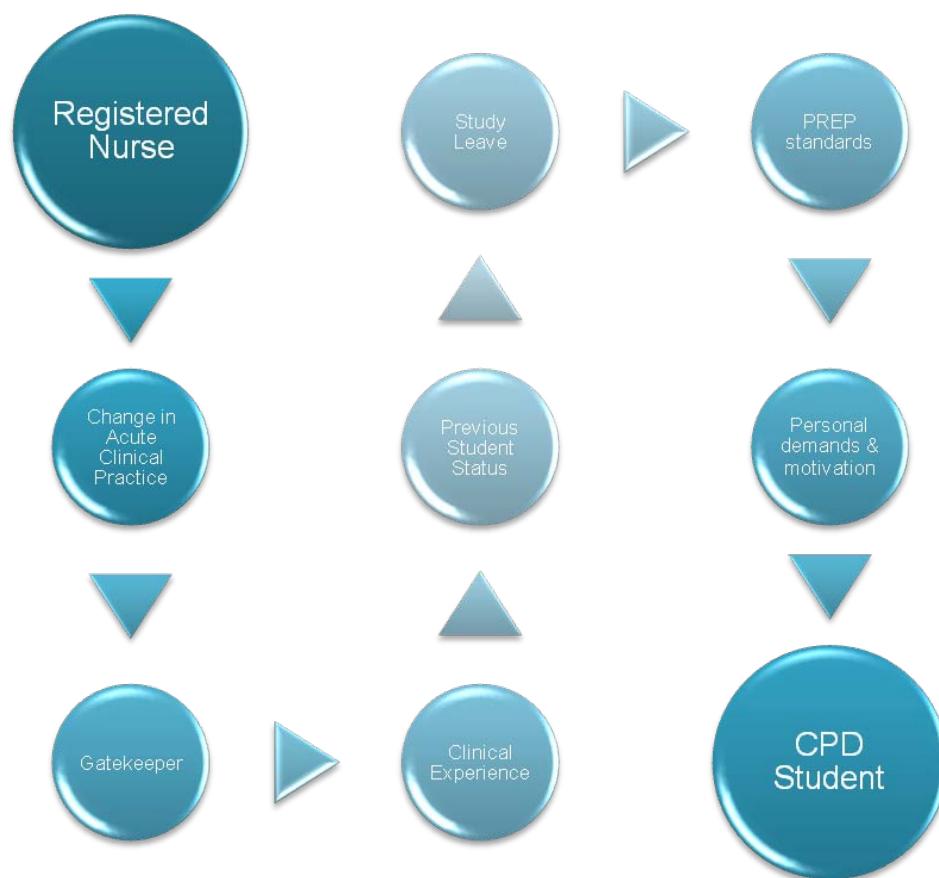
Chapter Five

Findings: Registered Nurse (RN) to CPD Student

5.1 Introduction

The following chapters will present the findings from the data collection and analysis of the study. This chapter contains an exploration of the profiles, motives and characteristics of the healthcare practitioners who were students on the acute illness course. Along with the data that was analysed, the chapter will present a discussion examining the experiences described by the respondents alongside a constant comparison to these with the related evidence-base that emerged from the literature. Figure 5.1 presents an overview of the themes that influenced the RN becoming a CPD student on the course. These will be discussed in more detail throughout the chapter.

Figure 5.1 Themes that influenced the RN becoming a CPD student



5.2 Characteristics of the healthcare practitioners undertaking the acute illness course

From 2006, over three academic years, 49 students had successfully completed the acute illness course. The course aimed to be generic in nature and applicable to any registered practitioner working in acute clinical areas although all students between 2006 and 2009 were RNs. The course syllabus addressed core subject areas related to the acutely ill patient. To ensure that the generic content was applicable to all clinical areas, the students were expected to apply the theory that they had acquired to their individual clinical speciality.

Table 5.1 Identifies statistics and some of the relevant characteristics of former students of the acute illness course. The data presented were reduced to encapsulate individual cohorts. Significant categories identified included, the former students' pay band, the clinical speciality and the length of post-qualifying experience. For the purpose of the study, the newly qualified practitioners had less than three years experience and the experienced RN had three years or more post qualification experience. A percentage is included with the numerical figures and though some statisticians claim that percentages are not reliable in samples below 100, it is felt within this study these percentages identified some significant patterns that informed the study's findings.

Of the total number of students ($n = 49$), the majority ($n = 39$, 80%) that undertook the acute illness course were band five nurses. Band five is the NHS pay band for the qualified RN at staff nurse level (DH, 2004a). Band five has several pay increments and gateways, ranging from newly qualified RNs to more senior staff nurses. Band six RNs on the acute illness course were junior sisters whereas the CPD students remunerated at pay band seven were working at ward manager level. The majority of acute illness students therefore, were band five staff nurses, with 65% ($n = 32$) of the students qualified within the previous three years and 35% ($n = 17$) with over three years post-registration experience.

Table 5.1 Characteristics of the former students on the acute illness course.

Academic year	Qualified 0-3 years	Qualified > 3 years	Pay Band 5	Pay Band 6	Pay Band 7	Medical /Elderly	Surgical	Other
2006/7 Total students 12	5	7	9	2	1	8 (4 ward 4 MAU)	3 (2 ward 1 SAU)	1 Private
2007/8 Total students 15	11	4	11	3	1	8 (4 ward 4 MAU)	1	5 1 Outreach 1 Spinal 2 CCU 1 Theatre
2008/9 Total students 22	16	6	19	3	-	19 (9 ward 10 MAU)	2 (1 wd 1 SAU)	1 Hospital at Night
Overall Total 49	32 (65%)	17 (35%)	39 (80%)	8 (16%)	2 (4%)	35 (72%)	6 (13%)	7 (15%)

The course was not aimed at students working in any specific specialist area, profession, or clinical experience. The majority, 72% (n = 35) of participants were RNs from medical specialities, with 13% (n = 6) from a surgical speciality and 15% (n = 7) of students came from 'other' specialist areas, for example operating theatre, coronary care or specialist units. This distribution identifies that the acute course meets their generic rather than specialist development needs, a student from an 'other' specialist area discussed:

"I felt like I needed to do something to improve myself and we do have acutely ill patients. I thought that doing this course would make me feel more confident looking after them first of all and I didn't want to do the (specialist) course at that point I felt I wanted to do something that was broader". Saul

Prior to the acute illness course, students wishing to undertake accredited clinical development would normally access one of the critical care courses,

for example coronary care or intensive care. These courses, however, were not always as relevant to the students' clinical practice within acute assessment and care areas, identified as thus:

"When I looked at the actual content of the (acute illness) course it seemed to offer everything that I was looking for to consolidate what I actually do as a job now. It offered the range of different types relevant to my patients' issues and really clarified the treatment of those patients and the reasons why ... others have done something like the critical care course which is more ICU based and we don't see ventilators and the actual area that, which you are nursing patients in, to do that would be false so it's more relevant to what we do". Sharon

5.3 Motivation to undertake the acute illness course

When the former students were asked at interview why they undertook the acute illness course, all participants had their own individual reasons for being involved. The most common reason for many of the participants was not primarily to gain an academic qualification some students identified, their reasons were to improve clinical knowledge and skills:

"I had already got a degree so I didn't need to study for that reason ... it was more for the clinical skills that I wanted to do the course". Sada

"Really I was not bothered about doing the degree no, it was the clinical ... there was just something that made it sound clinically credible". Sari

Sage already had a degree, so she was asked if she would have been more interested in master's level studies:

"No it was purely the clinical side, I just love the clinical stuff, I was not interested in the academic side, per say it's just the information I could get from it. I like the hands on I like to be on the wards with the patients and I like to know what I am doing". Sage

The acute illness course offered the benefits of learning experience that related directly to clinical practice and enabled the students to gain clinical experience and academic credit. This was much appreciated by several students typically as follows:

"Both really, I wanted to finish off my degree and ... I knew I would have to do the research part of it but I definitely wanted to do the other credits being something that I was interested in and was also relevant to where I worked now. It would be useful rather than doing something that would be just a piece of paper that I am not going to actually use the knowledge that I got". Steph

5.4 The RN and CPD student

Students from the acute illness course were by definition, all adult learners as well as RNs. Each student, to a certain extent had volunteered to undertake the acute illness course. All RNs are required to meet continuing professional development (CPD), Post Registration and Practice (PREP) standards (NMC, 2010a). The increased focus on CPD and PREP require a commitment by the RN to undertake a minimum of 35 hours learning activity related to their practice over a three-year period. A student reflected:

“I think there is a big focus on CPD so it (the course) is something else to have under your belt really”. Sally

The RN can meet the CPD standards in many different ways, examples include, courses, practice based learning or research and they do not necessarily have to access academic courses to demonstrate individual development. The RNs who undertook the acute illness course, did so as an optional CPD development and the acute illness course was but a small element of a large portfolio of courses and modules within the University's post-registration provision. RNs' preferred to access CPD studies that were clearly and directly relevant to their clinical practice, which was identified by both student and manager participants:

“You look at other courses and you have to do certain ones I mean the year before I did ... (another course), it was good I enjoyed it but I didn't float my boat, I wanted something that would relate directly back to the ward and my patients ... I know you use (another course) but something more that you can use clinically on the ward to help people”. Sari

“... so a lot of it is down to individual choice but I do try to encourage some courses relevant to practice”. Mari

Learning takes place at considerable cost to both the individual and society. In 2007-8 £4.38million was spent on NHS healthcare education in the Yorkshire and the Humber region (SHA, 2009). The adult students that undertook the acute illness course, similar to the majority of academic courses, dedicated extra time and effort out of the classroom to their studies, so that they might complete the required course reading and assessments.

They have to balance full time work and life responsibilities, all of which are hidden costs of developing the NHS workforce. A manager identified:

“It does tend to be down to the individual but obviously some individuals want to develop more than others and want to do more courses and maybe someone else may have child care issues and they may do courses that are shorter and they may do the one off study days may be the week block ... if someone definitely didn't want to do them you would maybe send them on shorter day courses and encourage that too”. Mary

Maintaining motivation throughout a course is a significant influence on the retention of the CPD students and this particular group of learners chose the learning opportunity that they believed had most relevance to their practice. According to Russell (2006), adults learn best when they are convinced of the need for knowing the subject area and often a life experience or a clinical event stimulates their motivation to learn. It has been said also, that CPD student nurses strive for understanding so that they can make more informed decisions about their practice (Sutherland, 1999). Some former students recognised the changing culture and practices within acute clinical environments, subsequently identifying their need to develop clinical skills accordingly but ultimately, their prime motive was to improve care for acutely ill patients within their clinical settings. This was recognised by one student as:

“I think people are getting poorer or seem to be getting poorer and you need to know what you're doing”. Sally

Improvement of clinical skills and competence is a major motivator to undertake learning and clinical development and no one comes into the profession to be incompetent or inept at their job (Sutherland, 1999). The RNs within the study wanted to be good at their job and sought to acquire the knowledge and skills to enable them to enact their role more effectively. A student acknowledged this as follows:

“I think from my point of view I think I'd reached a point where I was lacking confidence in what I was doing, I knew what I was doing on the ward but there were certain things that weren't fitting into place, I just felt that I needed to improve my skills in those ... I didn't always have the knowledge or background to justify what I was saying ... so overall just felt like I wanted to improve my skills and knowledge”. Sally

Some participants recognised their own personal development needs however, others students were urged to undertake the course by a more senior member of staff for development purposes:

“It was recommended to me by the senior sister because one of our colleagues had done it the year before and I was outreach link nurse and we had failed quite badly on the audit for outreach and the doing of MEWS so she recommended that I go on this course”. Samantha

“I worked for two years then I took a year off work and when I came back to work my manager said that that I needed to improve and it had set me back having this year off”. Saul

The students’ focus and motivations to access the acute illness course to improve their clinical knowledge and practical skills was a point put to the managers. A manager responded quite enthusiastically:

“Exactly! And that’s great, that’s good you don’t want people to go for the sake of it, or that they think that they have got to do a course, they have got to want to do it and they have got to want to develop clinically”. Macy

5.5 Study leave

The acute illness course, between 2006 and 2009 required the student to attend the university on one day consecutively for most weeks in term time. Some self-directed study days were also built into the programme. The limitation in the availability of staff to substitute for the students resulted in difficulties in releasing them in some instances:

“Yes, I got the days release for it, some didn’t get the full day did they? ... but yes I got it, I was lucky compared to most”. Sari

Service needs were frequently given priority over educational needs. In these times of increased pressure, study leave was always the first thing that was cancelled:

“Yes, it is really difficult (to release staff) due to winter pressures the Trust as a whole is cancelling study leave and any other sort of absence from the ward, that is why we have to be really careful releasing people on study leave before it impacts on patient care, you know we can’t allow people to go off and do additional studies when we are down to basic numbers”. Megan

Different managers in the study had different strategies for releasing staff for CPD, verified as follows:

“Well, there is 45 of us ... a big team of staff and we do try to share it out equally and they do all get study time, some time to the detriment of others we do try and say OK three (staff) is the maximum at one time although nobody is ever turned down ... it is for the benefit of the ward isn't it”. Mabel

“I think they are just trying to encourage everybody ... our staff development is just taking off again on our unit we have had a little bit of a lull for a while. We have a lead on it now and we are trying to encourage people to develop really and send people on more courses”. Mary

The allocation formulae and the organisation of staff development budgets varied greatly from place to place even within the same Trust. There was no consistency in the volume of support or of the terms for releasing students to attend the course. Some students were released from duty and given study time while others demonstrated their commitment by attending on their days off. A manager identified an alternate way to ensure that staff accessed study leave as follows:

“With budgets being quite managed I had to look at it in other ways so our charitable funds we tend to use that and if we need to we take money out of there for staff development and obviously we have quite a lot of money donated that can go towards that. In terms of ward resources, books and things we tend to buy with charitable fund monies ... I agree I think it is good when people are donating money to improve an area then you improve care by improving nurses' knowledge, and I think it is a valuable justifiable reason for using that money”. Mandy

Another reflected on the allocation of staff development on the clinical area that she worked:

“... it's been quite neglected really, it has been a case of you look after yourself you go and find the courses. You have to be very aware of how you lack knowledge yourself so you have to put yourself forward for those courses, there is no-one to say right you need to do this course ... somebody now takes responsibility for staff development, yes we didn't used to have anything like that but one of our charge nurses has sort of got on board a few people who sort of individually go through everybody sort of assessing where they are and asking them anything they need to do, or want to do to facilitate their learning really”. Sef

5.6 Study/work pressure

An inherent challenge for adult students and for these RNs is managing the balance between the respective demands of work, home and academic work.

A manager identified this problem in the team that she managed:

“ I think the negative side of (some courses) is that (another student) felt under pressure the academic work that she still had to do and I think that the academic side wasn't as favourable because a. she didn't have time to do it and b. when you are working full time it is the motivation when you are learning on the job ... you feel like you have learned all you have to do and know like (when you are) in practice how to analyse blood gases and look after patients on NIPPY⁴ whereas then you don't want to have to go and write an essay about it”. Mary

One student reflected on the differences of her CPD studies to the studies undertaken as part of her pre-registration course:

“Yes and this time (on the acute illness course) I think I did my assessment basically in one and a half weeks and normally when I was doing my nurse training I might have been working on it for about five weeks ... but I think it is the same in all Trusts your winter pressures tend to start earlier. We used to have winter ward from December to March and it is always open in September, it is open now. It is not classed as the winter ward yet that official title comes the middle of October, at the moment it is just called the over flow for the medical wards but it is the same thing”. Sarah

When discussing the amount of classroom learning, directed learning and additional reading as well as the assessments involved in any academic course, the students clearly must be motivated to undertake the amount of work involved to demonstrate learning:

“If you are doing a university course you have to have the motivation and ability to do all of it”. Sage

The literature confirms that CPD students and RN have many personal and professional responsibilities and this must be balanced against the demands of learning (Russell, 2006). All RNs undertaking the acute illness course were part-time students but also had onerous clinical RN roles, the majority on a

⁴ NIPPY – Abbreviation commonly used by nurses for Non Invasive Positive Pressure Ventilation

whole time basis of 37.5 hours per week. Although each student had made a personal and professional commitment to undertake the course, barriers to learning have to be acknowledged through the calculated attempt to provide, time, flexibility and support to individual students and to do so within the constraints of the University regulations.

5.7 Further study

Many of the students on the acute illness course had studied previously at the University, and particularly so at pre-registration level and their positive experience of this had motivated their return and had given them the confidence to undertake this new venture. This was reported as follows:

“Yes, I am going to do the [Specialist] modules next, I want to do that course now because I felt I knew quite a bit anyway and now going through ... even the ECG’s and ... arrest situations, it just ... built my confidence on what I knew anyway it was easier to learn it so I felt that’s why I really want to do this [specialist] course”. Saul

“The course has been quite hard for me at times and there were times I wondered why I’d started doing it, but I feel I have learnt a lot and feel more confident about my abilities and knowledge-base as a result of doing the course. I would like to do more learning as a result of the course”. Selina

“... And then I will have to see what else I can do, because I am sure I won’t want to stop!” Sarah

The inclination to carry on with further study was by no means universal for such as one student who said:

“No, it didn’t really appeal to me to be able to go on and do a degree really it’s not something that I am really dying for ... no”. Sari

5.8 Discussion

The exploration of the profiles of the CPD students accessing the acute illness course found the highest percent (80%, n = 39) were remunerated as band five nurses. The majority (72%, n = 35) were from the medical speciality and this reflects the demographic position because the speciality of medicine has the biggest total population of nurses within both local NHS Trusts who support students of the programme with surgery having the lesser figure. Sixty-five percent (n = 32) of former students were relatively newly registered,

suggesting the need for continuing development following pre-registration training to enable RNs to work confidently and competently within acute clinical areas. This finding concurred largely with Benner's (1984) suggested timescale on becoming a competent practitioner. It thus appeared that the majority of these CPD students were accessing CPD at an appropriate stage of their career and the first few years after qualifying being "probably the most influential in development of the personalised pattern of practice that every professional acquires" Eraut (1994, p.11).

The motives for RNs undertaking the acute illness course were for varied personal and professional reasons. Some recognised the changing acuteness of the clinical environment and the increasing dependency of the acutely ill patients on general wards and assessment units (DH, 2000; NICE, 2007). Both the former students and managers identified the need to develop individuals' skills and confidence within clinical practice and this proved the primary motivation to accessing these CPD studies. The University tends to predicate its marketing and recruitment to CPD courses on what the student will achieve in the accumulation of credit towards an academic award. Academic credit is not however, always the priority motivator of the RNs who engage in CPD. Drennan and Hyde (2009) similarly identified as 'fragmented discourse', the distinct differences in the motivating factors between different stakeholders in the CPD process that in this case were those of the University and those of NHS managers.

Many students found balancing the demands of work and study to be a considerable challenge. Students that take on further studies need to be dedicated, motivated and energised to get the best out of their CPD experience. A significant constraint identified by the student participants, was the disparity of support in the total number of days that they were released from their clinical duties. Both of the two local NHS organisations that supported students demonstrated clear inconsistencies in management of study leave and student support, even sometimes within the same organisation. This identified a difficulty that related to the concept of

'gatekeeper' and raised the question of who really has the responsibility or authority to approve students' access to further study? The 'gatekeeping' phenomenon is common within the education of healthcare professions. 'Gatekeeping' describes the process of denying or allowing access to someone or something, in this case being access to study leave (Lee, 2005; Holloway and Wheeler, 2002). This lack of apparent strategies for the allocation of staff development funds or releasing the RNs resulted in an inconsistent diversity of practices regarding their support.

Since establishment, despite generic marketing strategies to attract a more generic range of NHS professionals, the acute illness course had only recruited from the nursing profession. The course was delivered at undergraduate (honours) level whereas many allied health professionals, for example physiotherapists or occupational therapists and an increasing number of nursing courses, are being delivered at graduate level. This therefore suggested a need for the acute illness course to be delivered at a higher academic level for some students whilst still continuing the current honours level version for others. This would ideally, broaden the entry gate for graduate professionals and would continue to achieve the same clinical development needs.

RNs have a multitude of professional and personal hurdles to tackle to access and undertake CPD academic courses that are demonstrated in figure 5.1. Academic institutions engaged in the development of RNs strive to ensure that a university education reflects and is relevant to contemporary clinical practices that meet the needs and motivate the participating practitioners. To provide a positive experience the teaching, learning and assessment methods used within a course are fundamental elements that are used to shape the students encounter with it. Chapter six therefore, will explore, the participants' perceptions of the teaching and learning methods used on the acute illness course, with the inherent progression to chapter seven which will present the exploration of the assessment methods used throughout the course.

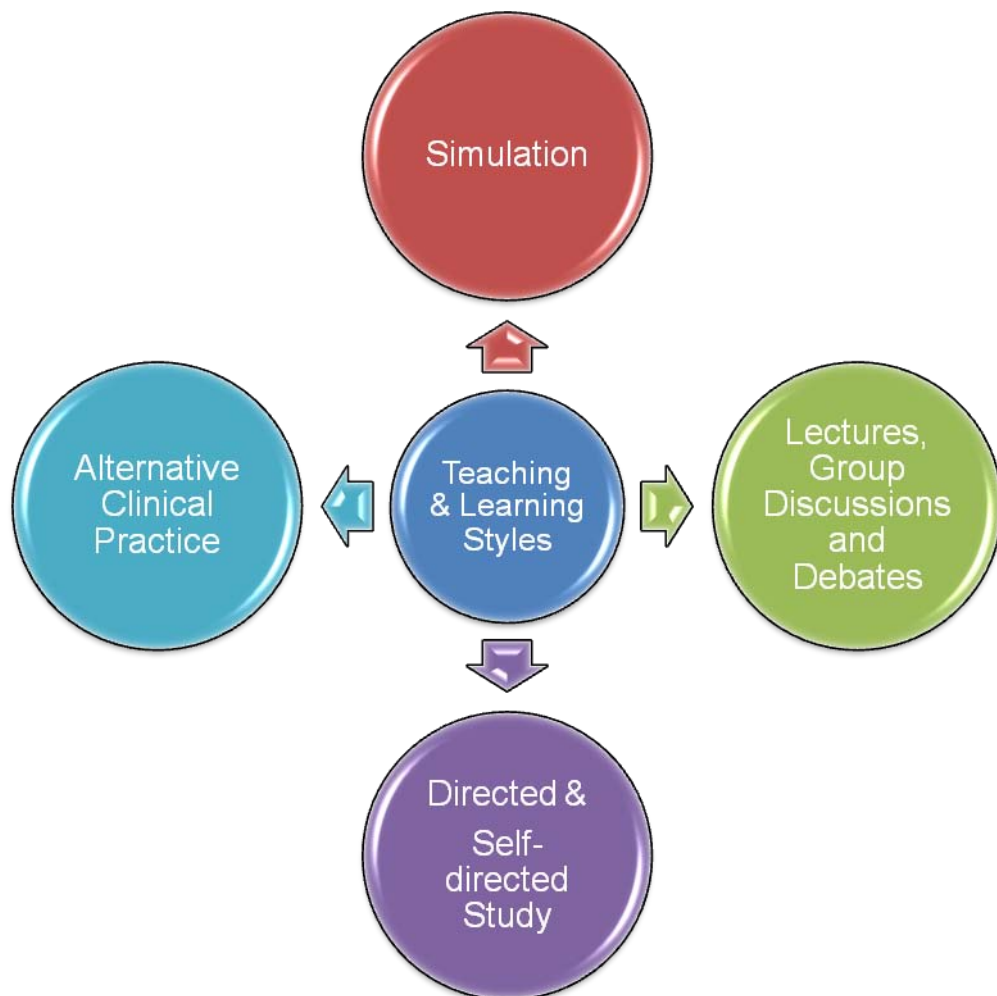
Chapter Six

Findings: Teaching and Learning Strategies on the Acute Illness Course

6.1 Introduction

This chapter presents the interview findings that have been critically analysed following exploration of the participants' perceptions of the teaching and learning strategies used on the acute illness course. The course exploited a mixture of styles and approaches to teaching and learning. These included the lecture, group discussions and debates, directed and self-directed study sessions, simulation and practice placements. These have been identified in Figure 6.1.

Figure 6.1 Teaching and learning strategies used on the acute illness course.



During the interviews, former students were asked their opinion on each type of learning method and its influence on any subsequent experiences. To elaborate outcomes of their experiences, they were encouraged to provide examples from their clinical practice. The following sections will present the findings concerning each teaching and learning style and will do so in no particular order of significance.

6.2 Lecture

Many of the sessions on the course were delivered through the lecture format. This device is often associated with the cognitive theory. Cognitive theory is the style of education that resonates most closely with the traditional view of education in which the teacher stands in front of the class and instructs the students. Curzon (1997) described how the cognitive theory in a teaching environment conveys information which students process and internalise. Cognitive theorists consider learning as an internal process that involves higher order mental activities such as memory, perception, thinking, problem-solving, reasoning and concept formation (Hand, 2006).

Lectures are used for three main kinds of objective (Bligh, 1998). Firstly they are used for the acquisition of information; secondly for the promotion and provocation of thought and thirdly, to initiate changes in attitudes. Bligh proceeds to discuss that the lecture alone however, is rarely adequate to achieve a fully comprehensive learning process. He contends that although the lecture has its place, that this is often one that is overtly prominent. The approach to the lectures on the acute illness course were delivered or facilitated in different ways, as one student identified:

“Well I like them! ... the lectures, well they were delivered really well, there is nothing worse than sitting listening to somebody just recite what powerpoint is on the board. The powerpoints were used as a means of triggering discussions and there was a lot of feedback making sure the parts that you had to learn were understood, I think that was good”. Sharon

The subjects that were taught were based on the problems arising in acute clinical practice highlighted in the literature, concerning such things as, airway and fluid management and the care of common respiratory and cardiac disorders experienced by the acutely ill patient (DH, 2003; NPSA, 2007b).

Some former students reflected that:

“Taught sessions have been delivered excellently ... I have found that all subjects covered by the course very relevant and very helpful to my work”. Sandra

“The lectures are good and they are needed, I mean like rhythm strips to me I didn’t understand them at all and now it has just clicked and everybody is saying how do you know that?” Sari

“The lectures definitely improved my knowledge because it clarifies it, it puts it into context; how the systems of the body works, why it fails and what you do about, it that was really good it explained why we do lots of things and explained how we treat certain things”. Sharon

Most lectures were delivered on an informal basis and the aim of this informality was to provide information and develop concepts that then provided student participation through their comments, questions or the sharing of their experiences. These strategies encouraged the students to be more active participants rather than passive recipients in the learning process. Rogers (1996) identified that if comments are invited and encouraged, the material presented has more relevance to the students’ practice that as a consequence, is more likely to be internalised. The student response was typified by the following:

“The lectures were quite interactive, I like that ... if people are talking and others are putting in their input as well and then you get to see it in the flesh, I like that interactive learning”. Samantha

By tradition, the lecturer occupies a more superior and controlling position to that of the student. Yet with the conventions of adult learning, the lecturer and student have a none threatening, interactive relationship, acknowledging that both has relevant experiences to share. Russell (2006) advocated creating conditions that supports mutual trust and the clarification of reciprocal expectations. Russell goes further and claims that if inadequate attention is

given to these factors, that the students will become disengaged, are likely to 'switch off' or undermine the value of what the lecturer has to say.

Some classes employed facilitation through the joint use of lectures and complimentary discussions sessions about policies, practices and relevant experiences. Through facilitation, the teacher exposes students to a range of learning opportunities without actually directing them. By acting as a facilitator the lecturer is not exerting total control of but rather working in partnership with the students (Hinchcliff, 1999). The effects of this were recounted as follows:

"The lectures on this did work as it was something that I wanted to learn and there was quite a lot of discussion as well. You know it wasn't just sitting there and being told, it was like a two way conversation ... so I like the type of lectures we had". Sandy

The classes became progressively more demanding as the course progressed and this was problematic for students that did not attend each week, although all the learning materials and suggested reading was provided on Blackboard, the virtual learning site. Many of the more theoretically based classes were augmented by accompanying simulation exercises that were received as follows:

"I liked the way we had lectures on something the week before and then the week after we would actually go in (skills lab) and do simulation about it after". Sana

In the lectures some of the students that did not have as much confidence to speak out as others recognised the benefits:

"(the lectures) ... I found they were good and because of my confidence I am more comfortable in that situation where I can just sit and listen to others rather than join in, that's when I get really embarrassed!" Sam

The difficulty with lectures as a teaching strategy for any student concerns their attention capacity and span of concentration (Bligh, 1998). The lectures largely followed the University timetable system of two-hour slots, despite evidence showing that a person's attention and assimilation capability declines considerably after 20 minutes (Quinn, 2001). This description of this experience was:

“I appreciate that sometimes if you are sat in a lecture your mind can wander a little bit”. Sam

“(I found the lectures) ... tedious sometimes ... I don’t always take it in ... I’m a doer, I like someone to show me what to do then do it and that is how I learn really”. Sal

A further drawback regarding lectures was the students’ inability to recall information after the lectures and it is recognised that recall ability falls to around 20% of the total information delivered after one week, something recognised in the literature (Quinn, 2001). This was described as follows:

“I don’t tend to be very good at retaining information, if I get a piece of paper and it’s been talked through I don’t always retain information that is spoken at me, it goes in one ear and out of the other”. Sal

“It just clicked and certain things did just click and other things I didn’t well you don’t retain it all”. Sari

The students on the course all came with a variety of acute clinical care experiences as well as life experience in general, which provided a rich foundation for learning to occur. These experiences were highlighted as an important aspect of their learning experience as follows:

“It’s good to get out and about at different levels and hear about what different people do, it’s networking isn’t it, I have seen different faces about after the course and said hello how are you doing? And chatting and you get to know people”. Steph

Learning that is relevant and that acknowledges the positive aspects of past experience, ensures it has more meaning for the individual (Rogers, 1996).

An example of this was:

“... That was really helpful given the diversity of the skills in the room; everyone was from different backgrounds so it was nice to see what other hospitals and what other units did, because there were lots of other different bits and pieces done differently”. Sef

The students valued the small class size. Saul and Sharon reflected on the benefit and confidence to interact with their peers and their teachers this was very different from being part of a large group during their pre-registration lectures. This was described as:

"I don't really like to speak out so much in the class ... but I remember at university I don't know there were just too many people I wouldn't speak ... I think it is nicer when there is a small group and you get to know the other people in the class and then you do feel more confident speaking out and answering questions, where as I wouldn't have dared when we were in the big groups at uni". Saul

"I liked the size of the classes it was good it wasn't too ... well I don't think anyone felt intimidated about speaking up everybody spoke and everybody talked about their own experiences and you got some really good ... well some good tips really from other people that was excellent". Sharon

Lecturers have a responsibility to maintain the necessary skills and knowledge to manage, involve and enable students to get the most from the group dynamics that exist. Central to this is allowing students the chance to give their experiences and feelings. The student perspective on this was such:

"You always get the odd one obviously that likes to tell the story but everybody had their own say. Yes I don't think anyone felt intimidated or you know if they had something to put across they would put it across about their practice ... there was one girl that kept chirping about (clinical area) ... I think there is always a vocal one". Sally

Although Sarah had a major issue with group discussion as a method of learning:

"Well me personally ... when we had had the group discussion, I could leave feeling worse than I did when I had gone in".

On further investigation Sarah discussed how:

"... because it's like different Trusts do different things and I remember one (week) when someone said they had been doing obs(ervations) and they said that: "when something is out, like when the blood pressure is out then they would go back and do the full set of obs", whereas on our ward, at the time, we were just going back and doing the one that was out. It sort of made me feel, sort of, inadequate as if we were doing the wrong thing ... and obviously we were, because then a couple of weeks later it was wrote in our communication book that we should be doing a full set of obs on everybody even if only one thing was out you should be doing a full set of obs. So obviously I had gone back and said do you know what I mean this is what's happened at uni I feel really crap about it and I've been made to feel stupid".

Although Sarah had taken an important matter back to her practice that had addressed incorrect practice, this had been detrimental to her confidence in class:

“... after that I sort of I tended ... I tended to sit there and keep my mouth shut and not say anything but yes looking back yes I shouldn't have allowed it to make me feel like that. Now when I speak up ... it depends if it's something that I am not sure about ... I will sit there because I don't want to look stupid in front of everybody and I think that is the same for everybody you know people that don't contribute to the discussion groups maybe they are a bit quiet and introvert and don't want to look daft in front of people”. Sarah

Some students believed that everyone was largely content with and comfortable in contributing and the teaching staff has also thought this to be the case. But this illustration demonstrates that it pays not to be entirely complacent about what any particular student is really experiencing as a consequence of interactive group work.

6.3 Simulation

Simulated clinical practice is a teaching strategy that is being extensively developed in parts of pre- and post-registration healthcare education and is a prominent and valuable learning strategy on the acute illness course.

Through technological developments, changes in the provision of clinical placements and a shift in what is considered ethical in practising essential clinical skills with patients have led to an increased use of simulation in health service education and training (Alinier et al., 2006). Although simulation is not a new concept, it has been given much greater emphasis in the literature (Murray et al., 2008; Prescott and Garside, 2009). The local University has invested considerable funds in the development of sophisticated clinical simulation rooms to help create a variety of healthcare environments.

Simulation is defined as:

A near representation of an actual life event; may be presented by using computer software, role play, case studies or games that represent reality and actively involve learners in applying the content of the lesson
(Billings and Halstead, 2005, p.425)

When planning the acute illness course it was decided that simulation would be integrated throughout the syllabus as a principle teaching method.

Simulation in this case was not seen as an 'add on' teaching strategy, rather holistic and problem-based in the form of a scenario-based technique. This was used to enhance the current delivery of evidence and also to provide an alternative means to allow students to convert this into practice in a safe clinical environment. For instance, the theory sessions on the assessment and management of a patient with coronary heart disease would be followed by a simulation session applying the care and management of this group of patients.

Simulation is the promotion of understanding through 'doing', adopting aspects of the behaviourist theory and using experiential learning techniques. Put simply, behaviourism refers to learning that occurs as the student forms associations between a stimulus and response that is then reinforced (Quinn, 2001). Whilst the term experiential learning has been variously defined, its most frequent interpretation is that students learn best when they are actively engaged rather than being inert recipients in their own learning (Weil and McGill, 1989). Experiential learning is regularly thought of as, 'learning by doing' or 'being there', sometimes on the basis of initially being involved as an observer but then participating in the care or particular skill with supervision (Boydell and Burnard, 1993; Heron, 1999).

Dewey's (1933) theory of experientialism claimed that the meaning of an action is related to its consequences. For example children learn best by being able to experiment by being given the opportunity to play and observe the consequences of their actions. The experiential perspective claims that the student cannot expect to learn solely as a recipient of experience and that the most important form of experience is direct action (Weil and McGill, 1989). As a result of this, students must be able to act upon their environment and observe the consequences of their actions. In this way the simulated experience becomes a transaction between the student and the circumstances over which they must achieve mastery. Hand (2006)

recognised that if students are placed in conditions they know little about, learning will occur through trial and error and hence, learning this way, in nursing may have adverse consequences for the patient.

Bligh (1998) identified that students learn best by active methods that elicit desired behaviours and that the best way to teach them how to apply their knowledge is to let them practice doing so. This was recognised thus:

“I like someone to show me what to do then do it and that is how I learn really”. Sal

“... if you are in a group or a simulation situation then it does keep you a lot more focused and you remember things”. Sam

The use of simulation as a teaching strategy has the obvious advantage that it allows the learner to practise, repeatedly if necessary, without exposing patients to any unnecessary risk (Cioffi, 2001). Simulation provides a taster and a scenario of real life circumstances where the student can safely practise before they perform the ‘real’ thing with the patient. Sari identified how simulation enables experiential learning to take place within a safer environment than clinical practice:

“You could get involved but there wasn’t ... really consequences, well there was consequences like but you know it was safe, it is a safe environment ... I don’t particularly like role play but that’s not, I don’t really like that sort of thing but it was different it wasn’t like role play, it felt like you were actually doing it, you were safe and you were being watched, without being criticised when you have done something wrong, but you do get feedback if you missed something and I like that because when you are in a real situation you can’t do that, although you can say, well you can analyse it and I think it is more scarier when you find out you are not doing it properly at that level, yes I got a lot out of it and enjoyed it”. Sari

The effectiveness of simulation is naturally dependant on the faithfulness of the experience in relation to the reality of the experience (Parr and Sweeney, 2006). De Young (1990) described how simulation enables learning to take place in a less complex way than when it occurs in the real world. Every effort was taken when writing scenarios to ensure they were not embellished for additional effect, yet that they accurately reflect the reality of clinical practice.

Similar care was taken to prepare the simulation environment, with appropriate, fully working equipment and consumables in a setting that as closely as possible reflected the acute clinical setting. In practice, this can require the substantial investment of human resources, time and money.

Simulation can take many forms, some examples include the use of simple procedure manikins designed to develop psychomotor skills such as tracheal intubation, intravenous (IV) cannulation and defibrillation (Perkins, 2007). Others include a range of low, intermediate and high-fidelity manikins or through the use of actors (Bland and Sutton, 2006; Alinier et al., 2006; Perkins, 2007). The term 'fidelity' refers to the extent which the manikin reflects reality and as technology has developed over the years so has the 'life-like' nature of some of the manikins (McCallum, 2007). Some high-fidelity manikins have been programmed to mimic human physiology and will respond 'appropriately' to interventions or treatments given by the student. For example, administration of intra-venous fluids will correct the signs of hypovolaemia (Perkins, 2007). Intermediate-fidelity manikins require the facilitator to alter the physiological parameters, ideally in real time in response to patient deterioration or treatment. A variety of fidelity manikins were used on the acute illness course, most commonly the medium-fidelity manikin SimMan®. SimMan® is an advanced, instructor-driven, full-size patient simulator (Perkins 2007). SimMan® generates realistic heart, breath, bowel and blood pressure sounds. Vital signs are displayed on an accompanying monitor, with the displayed range of parameters, adjustable depending on the students' requirements. Appendix ten demonstrates a typical example of a simulation scenario used on the acute illness course.

The students on the acute illness course were provided with a clear set of expectations during the simulation sessions which was set out in the module handbook (HHN 1243, module handbook, 2008), including:

Relax and enjoy, simulation involves a type of role-play which some find a little uncomfortable; we are not trying to embarrass or undermine you in any way. Participate and work as a team. Treat the manikin as you would a patient, this is not easy, but will develop as we do more

simulations. The manikin can never replace a real patient, but if you can get beyond it being plastic, you will learn more. Appreciate that inevitably there will be slight Trust to Trust differences in the paperwork and occasionally in the treatment options/protocols used.

Each cohort and the groups within it were asked to produce sets of ground rules regarding such considerations as confidentiality and respect. The students were encouraged to step out of their 'comfort zone' by becoming involved in the simulation process. Initially, the simulation sessions were purely about learning as the students were not being tested at this stage. The simulation groups were relatively small in number and a team approach to tackling the scenarios was adopted. The literature confirms that students must feel safe to interact, experiment and explore new topics and constructs. "In dichotomist fashion, they must feel safe to succeed as well as to fail" (Shuck et al., 2007, p.4).

Simulation offers the opportunity for a 'time out' to be called (Bland and Sutton, 2006). This can be by either the facilitator or the students to, for example, ask how to use a particular piece of equipment, to ask about the rationale behind an aspect of care management or to review progress made or refocus the team. 'Time outs' are not always practical in a clinical setting, but are possible in simulation sessions.

Many students on the acute illness course had not previously participated in simulation in this form. In preparation for the first session the students were introduced to the concept of simulation, and were introduced to SimMan®.

Sandy discussed how she found the simulation sessions:

"I actually found the skills lab here more beneficial than the skills that I have done before, basically because I know it's a dummy but you can make it so real, you know there were breath sounds, that for instance is something that I have never done, we have just got stethoscopes hanging up behind the bays and they just collect dust, so now that is something that I have had a go at". Sandy

When evaluating pre-registration student experiences a principle outcome of simulation has been reported to be 'confidence building', this was reflected

similarly with CPD students (Prescott and Garside, 2009). Although many commented that initially the sessions were vaguely threatening, they then reported that as the course progressed and they gained more experience of simulation, they settled and began to learn from the experience:

“Well I didn’t really like the idea of it at first ... but then you feel more comfortable with the other people and you don’t feel as bad when you are doing it”. Saul

“That scared me to death at first! But ... towards the end I was a lot better at it”. Sam

“The simulation (sessions), yes were really nerve racking but ... they do make you think, and I think it’s what you told us in the beginning when you first start you feel so alien and you feel so stupid practicing them but by the time you get to the end you don’t worry ... you are nervous but you haven’t really got time to think and it is more relevant to what you are doing”. Sharon

“Daunting ... But good experience... Really good!”
Sarah

To accelerate the ‘settling in’ process students require preparation and time to adapt to this new learning strategy. To support the student to become fully and actively involved in simulation can take more than one simulation session for them to become acclimatised to and to benefit from the experience.

During each simulation session, students worked as a team to systematically assess and care for a given patient with an array of needs, including physical, emotional and social problems. Students were required to identify the key physiological abnormalities and treatment options, to know their own limits, and importantly, when to get appropriate help. Integral to the sessions, as well as fostering of team work, students were encouraged to critique each other’s performance.

Each simulated scenario was followed by a period of feedback to reinforce what had been learned (Perkins, 2007). Members of the group who were assessing and caring for the patient on the first and subsequent attempts were asked by the facilitator to critique their own and each other’s

performance and this followed the format outlined by Mackway-Jones and Walker (1998). Mackway-Jones and Walker recommended that firstly the student should recognise the positive things that had happened during the learning exercise, this is then followed by what they would do differently if they had a second attempt. The facilitators critique then followed, reinforcing what had already been discussed by students and adding any further comments, if appropriate.

“I think it was quite good with the simulation and the evaluation afterwards, what you did well and what you did wrong, so if you had done something ridiculously wrong or done a silly thing you are sat in front of an audience and you have got them all watching you ... it's hard but yes I think it was handy afterwards ... that's why it probably worked”. Sada

During simulation sessions the students were able to reflect on the knowledge and theoretical proposition that underpinned what they were doing in practice. The intention was that the student would transfer the skills and knowledge gained through the course into their clinical environment although it was acknowledged that there was no empirical evidence simulated learning increases clinical competence or influences patient outcomes (Alinier et al., 2004). The students however, clearly identified the learning that they perceived to occur as follows:

“I think it puts the theory that we learnt in the classroom into practice, it reinforces the taught sessions”. Shane

“Simulation makes you approach a clinical situation with confidence to manage situations using the correct approach enabling me to give the correct treatment quickly and efficiently”. Sean

Simulation can be seen as an alternative teaching strategy best regarded as providing a stage between delivery of theory and practice (Lammers, 2007). In other words, simulation does not just allow for evidence to be integrated into practice, but offers an opportunity for this evidence to be delivered in conjunction with, and applied to practice. The students recognised this:

“I like the simulation too because I like how that benefits you it tends to focus you a bit more, and I think then you learn to control the panic in the situations so if you know what you are doing and you have been through it time and time again then it does have a real positive aspect”. Sage

“The scenarios were very good ... the cardiac arrest things that we did during the lessons ... it puts you into that position which does happen and I have started doing the (ABCDE) assessment as I go along with the poorly patients”. Sal

“Although it’s (simulation) the scariest thing I have ever done it is well worth while, if you get a patient that is acutely ill you do need to think quickly and think on your feet so it’s well worth while”. Sharon

During the interview one of the students reflected on the difference in their clinical practice both before and after the simulation sessions:

“It was a case of I’ll stand back even though I was a qualified nurse and yes a patient had had an arrest whilst I had done my training, and we had done simulation skills throughout our nursing training it was still a case of I was holding back. I don’t feel ready to jump in, but whilst I was doing the course I had a patient who had a cardiac arrest and the simulation training came back to me. I had got (the tutors) voice in my head saying right, I opened the patients airway I put the non rebreather mask on and wacked the oxygen on whilst I was trying to lay back the bed and start the compressions. So obviously it is there and it does stick even though you might walk out and think an hour later ... what did I learn in there, it’s actually sunk in and it’s there in your sub-conscious. It’s given me more confidence now has the simulation training now and I have actually managed to maintain someone’s airway twice and I think it is down to the simulation training on the acute illness course”. Sarah

In many academic courses, theoretical subjects and simulation or skills are often taught in isolation. Within the simulation classes the strategy aimed to provide a holistic ‘hands on’ approach to managing the acutely ill patient described by one student as:

“Because you touched on every aspect of that patient saying what the gases were what the ECG were, as well as having a relative asking questions you were looking at the whole picture instead of just one area. You get a realistic picture and as much as we all hate getting up there, it is good to get hands on, because if you are ever put in that situation you can deal with it better, because you have practiced it and I learn better from doing rather than listening. If you told me about the heart for 2 hours I would just switch off but showed me a diagram of an ECG on a patient I would be much more inclined to listen and understand”. Sana

6.3.1 The ABCDE approach

Throughout the course the ABCDE mnemonic was used for the assessment and management of the acutely ill patient. This approach is demonstrated in table 6.1. The ABCDE strategy provided a simple but effective systematic line of reasoning on the immediate assessment of the acutely ill patient. The technique begins with the most 'life threatening' system (A), the airway and if there are any problems, they must be dealt with before moving on to the next system assessment that is (B), breathing. This style of assessment is now used in most acute and critical care areas and advocated by the Resuscitation Council (UK) (2005). Sef identified that:

"The simulation scenarios allowed us to use the ABCDE approach to undertake a logical assessment to the patient. This principle applies when assessing any acutely ill patient and can therefore benefit my practice". Sef

Table 6.1 the ABCDE assessment of the acutely ill patient

Airway assessment	Is there evidence of airway obstruction (noisy breathing, stridor, obstructive respiratory pattern) Is there failure of airway protection (pooling of secretions, absence of spontaneous swallowing) Is there evidence of mucosal oedema (anaphylaxis) or foreign body aspiration
Breathing assessment	Is there evidence of increased work of breathing (tachypnoea, accessory muscles use, recession) Is there evidence of hypoxia or fatigue (cyanosis, feeble respiratory effort) Is there evidence of pneumonia or chronic obstructive pulmonary disease
Circulation assessment	Is there evidence of bleeding (haematemesis, malaena, concealed bleeding) Is there evidence of shock (heart rate, capillary refill time, blood pressure) Does the patient have evidence of sepsis (any two of heart rate > 90, respiratory rate > 20 and temperature > 38C or < 36C) Is there evidence of acute coronary syndrome, heart failure or arrhythmias
Disability assessment	Is there any signs of decreased consciousness (AVPU or Glasgow coma score) Is the patient hypoglycaemic (Blood glucose) Are there any localising signs (pupils, cranial nerves, limbs)
Exposure assessment	Is there any obvious physical sign of illness (wounds, rash) Is the patient hypothermic or pyrexial

6.3.2 Confidence in simulation

Lack of confidence has been identified as a barrier to learning for the adult student (Russell, 2006). Very few students felt confident immediately undertaking the simulation sessions, a significant amount found the simulated sessions 'nerve racking' and daunting. Some students even became quite 'emotional' at times. Thus the question is asked, why simulation was evaluated as such a positive learning strategy that in the words of a student:

"The simulation training, even though I don't sort of like doing it because you are on show and everyone can see you and it's a bit more different than when you are at work because you are expected to break everything down and discuss the rationale for something whilst your doing it". Sarah

"As much as we all hate getting up there, it is good to get hands on, because if you are ever put in that situation you can deal with it better, because you have practiced it and I learn better from doing rather than listening". Samantha

The emotional impact of simulation was thought to be an important finding of the study therefore, will be explored in further detail in chapter seven.

6.4 Clinical placements

Four clinical placement days were embedded into the course timetable and these were regarded as thus:

"The placement days were good being written into the programme ... as I have started a course before only to be told that we had to do extra practice that they didn't know I had to actually do that so you can't do it you will have to stop the course. So that was quite important to me that they were written into the timetable". Sandy

The students were encouraged to spend these days in any acute or critical care area on a supernumerary basis. Although students could be as creative as they wished, they had to identify their own learning aims and the potential outcomes related to this period of acute practice. Many of the students chose to go to high dependency areas and intensive care units, accident and emergency units or to join critical care outreach teams. Placement opportunities present students' with learning experiences and opportunities to

practice without the artificiality of the classroom (Jarvis et al., 2003). Many professionals would argue that learning gained from placement experiences is much more meaningful and relevant than that gained from the classroom setting (Quinn, 2001).

Placement learning on the course used a combination of behaviourist theory supported by the humanistic approach within the setting where experiential learning occurred. The humanist interpretation is described as subjective, non-directive and focuses on the students' human qualities of conveying warmth and empathy, in an attempt to encourage a greater understanding of self. It does not impose or direct the individual, but rather facilitates the learning process (Rogers, 1996). Rogers holds the view that the individual has a natural ability to learn and it is this inner drive that this method brings. The students on the course were encouraged to focus learning which they perceive as important for their self-development. Some students, who had received little opportunity to control their learning in the past, struggled with student-centred strategies (Ghazi and Henshaw, 1998). This was experienced with some students who preferred more structured and guided methods. Once the flexibility of this method was overcome, many other students embraced it valuing setting goals to develop individual practice and this was described as follows:

"I was quite interested in auscultation, I think on our ward it is a good skill to have with patients going into LVF ... so I decided to go out with the physiotherapist, she was based on intensive care, she gave me a presentation and then we went and looked at a couple of different patients and then I was working with her, that was really interesting and they were just really good, I really enjoyed that". Saul

A student from a surgical area discussed what she had learned from one of her placement visits within a medical assessment unit:

"MAU ... that was a bit of an eye opener because I am not from a medical background I am from a surgical background and that's where you to see things like we looked after a patient that went into fast AF (atrial fibrillation) and we saw a COPD and she was quite sick and that to them was quite normal and to me I was like all in a fluster, I was like are we going to move her anywhere and they were oh no it is safer to

keep her here. I'm like that ... really? So yes it was really good to see that". Sana

The students worked within a division of labour within their hospitals that was unlikely under normal circumstances offer them a look at alternative clinical environments and what this opportunity within the course provide was described as follows:

"I really valued the placement opportunity because as (qualified member of staff) we don't get the chance to go off with these different people. I went out with outreach ... to the different wards and you just see a different side of things don't you, like this is what they do and why they do it. I found that really useful". Sari

"... it was good being supernumerary and having the chance to do that and just getting involved with that and going and seeing different wards". Sada

Students gained many experiences from the practice placements but learning was not always about the patients *per se* and one student found the placement experience made her think about her future career:

"I went to A&E which was excellent from my point of view... I didn't particularly learn anything new ... I thought I'd really love to work there but I realised ... it wouldn't be for me". Sharon

Phillips et al. (1996) recognised that pre-registration students on new placements were often treated as if they knew nothing and that their former learning and accomplishments were often ignored. Although, a student found:

"... it was quite strange being a staff nurse and having to follow people in an area that you don't know so I found that quite hard and I found it hard to get much out of that placement ... I felt like because I was a staff nurse I should have been involved and should have been doing things but I couldn't because I didn't really know what was going on so much and I don't think I really got anything out of that one". Sean

Macy provided a managers' perspective of the student going to their alternative placement as a supernumerary member of staff:

"I think that they benefit from being able to just learn than opposed to having to do their own job as well and trying to do it in and amongst other things because you can't guarantee that you have got your interesting patients either, you know you could be down on (ward X) looking after patients that are relatively well with a plan of care yet someone could come in acutely unwell on (ward Y) care that you the

cannot get involved with because your work load doesn't allow and I think that is a shame of it". Macy

(Further transcripts from the previous students' interviews about the experiences from alternative clinical placements can be found in Appendix eleven).

6.5 Self-directed learning

To meet the high demands of the busy practitioner many university courses are moving to a distance learning methods. Distance learning is a flexible educational delivery system, which commonly uses self-directed learning methods such as e-learning, usually with tutor guidance and/or support. This method was only used minimally on the acute illness course. It did however, come up in some of the interviews as not being the most popular method of learning something that was captured as follows:

"I think you have got to be quite a disciplined person to do something like that and you have got to have a balance and some people can work on their own and be given work and go away and do it, but myself I can find the most boring thing like ironing more interesting than actually sitting down and reading a book". Sally

"I like coming away from uni and thinking I have actually learned something today, whereas if I sat at home and read a book, it wouldn't sink in as much ... If you don't quite get something then you can ask the question whereas if you are at home trying to do it then you can tie yourself in knots. Books don't always explain things; you need someone to explain it in layman's terms, for the dummies". Sana

Sally and Selina raised the benefits of the learning from peers within the group which would be very difficult to replicate through distance learning setting:

"It [distance learning] takes away the fact that you do learn a lot from other people ... that was the important key to the course the interaction with the tutors and the other students and that's why it works so well". Sally

"A lot of managers are pushing for the course to go on line ... I think it would be a shame. It takes away ... well you do learn a lot from other people, don't you". Selina

Samantha reflected on distance learning from her pre-registration curriculum, comparing it to learning alongside a busy career:

“Self-directed study was alright when you were at uni[versity] and you worked Monday to Friday nine to five (as part of the course) but when you are working full time then a day off is a day off and you value your days off, so if someone said to me you have got to go and do this or my mate says do you want to go out for a drink I would much rather pick the drink”. Samantha

Sage, did not, however, expect to have all aspects of the course directly taught:

“I expected to do reading around; I expected to have to know the basics ... I expected to learn the rest around it. I don't think you can cram everything into the course ... so I think you have got to decide when you are coming on it what you want to take from it and what you want to learn from it. I don't think that it can be spoon fed ... you have got to consolidate it yourself ... you have got to go away and look at it and perhaps pick up a little bit more information that will help you absorb that better ... I don't think it is necessary down to the course and the tutors to do it for you”. Sage

To achieve a successful learning experience, the individual must be able to reflective and reflexive on the experiences that they have encountered. Boud (1987) described how reflection in any form of learning from experience and in most of the learning in which the adult engages, is not just about acquiring new ideas but is more about assimilating these ideas and altering practice as a result. To develop an incrementally progressive learning process that was reflective, the students were encouraged to provide a reflective commentary on their caring experiences and to include this within their portfolio of learning. One student demonstrated that this was happening:

“We could take away what we had learned reflect and build on it for the next week”. Samantha

6.6 Discussion

The eclectic mix of learning and teaching strategies used on the course was intended to accommodate the differing learning styles that students bring with them. Priority was given to the deliberate association between theoretical learning from the classroom and the CPD students' clinical practice. Lectures provided a useful platform to convey important factual information. These were delivered on relatively informal bases which were facilitated rather than being totally didactic with the recognition of the value of the student/lecturer

interaction during the sessions and this was made manageable because of the relatively small student groups. These sessions permitted valuable discussions regarding practice dilemmas and the sharing of local policies, as well as providing a forum for reflection. The method aimed at providing a positive milieu and aimed to maintain the student esteem that is associated with successful learning experiences. The findings of the study endorsed the view that during any teaching encounter, it is essential to generate and sustain the student's motivation and interest (Quinn, 2001). Changes in teaching and learning styles and regular comfort breaks proved essential to ensure student attention in attempts to support the retention of what has been conveyed.

Simulation within small groups as a learning strategy was evaluated positively, although, on occasions it was perceived as stressful. This success was related especially to students feeling of being supported within a safe learning environment. Once students' initial apprehension was overcome, they warmed to simulation and subsequently discussed instances where learning in the simulated environment had been transferred to practice settings.

Benner (1984) identified how the 'competent nurse' is at the stage in their learning where they can benefit from decision making games and simulations that give them practise in planning and co-ordinating multiple and often complicated circumstances. Integrating the clinical placement days within the programme provided the practicing CPD student with valuable opportunities to apply and consolidate their clinical knowledge on a supernumerary basis thus affording the opportunity for protected learning time in alternative practice settings. This experience also provided a rich source of individualised experiential learning and served as a trigger in subsequent discussion sessions when students were able to recount their subjective experiences.

All teaching and learning strategies on the acute illness course were interactive and required a high level of student engagement and these were much valued both for their relevance to acute care and for their informality.

These interactive processes enable the active participation of the students rather than getting them to adopt more passive roles. Students began to recognise their own learning styles and to identify their strengths and limitations through the diverse teaching methods to which they were exposed.

The following typifies this:

“I liked the mix once I got used to it, they all have their different strengths because everyone has their own learning styles anyway so where one person might excel in one and another might not, but because you have such a range of people in the group I think that it is important to have different techniques instead of doing things the same all the time or it can get quite repetitive”. Sam

“I think it was quite a good mix and quite a good way of delivering the course, it worked really well and it catered for everybody really didn't it”. Sada

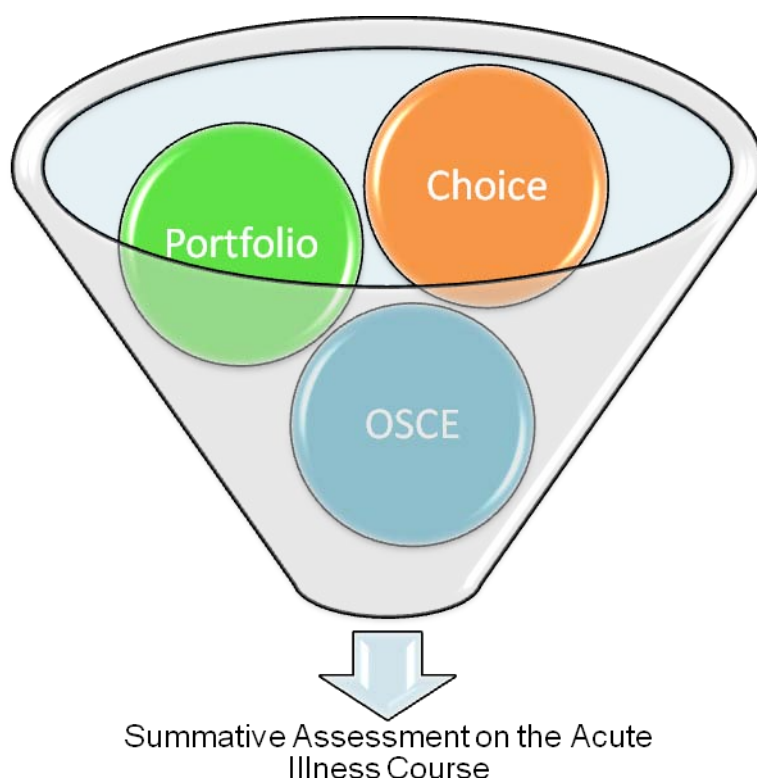
Chapter Seven

Findings: Assessment strategies

7.1 Introduction

This chapter will explore and present the study's participants' perceptions of the variety of summative assessment methods that were used on the acute illness course and are described in Figure 7.1. The principal aims of these strategies was to improve the students' knowledge, skills and competency to practice in acute settings whilst bearing in mind that no individual assessment type is totally efficient and each has its strengths and weaknesses (Nicklin, 1996). In addition, communication, written, reflective and critical analysis skills were assessed in relation to the University's generic honours level study criteria (Appendix thirteen).

Figure 7.1: The summative assessment strategies used on the acute illness course



For the advanced assessment and management of the acutely ill patient module the student was assessed by:

9. Part 1, a clinical practical exam, commonly known as an OSCE, (objective simulated clinical exam) with 10 honours level credits for this module.
10. Part 2, a 6000 word portfolio with 30 honours level credits

During 2006, the first year delivering the course, the professional principles module required students to undertake a 15-minute presentation and a 2000 word essay. The following year as part of a larger project also involving pre-registration students, the students from this module were given the choice of the assessment method that they would undertake. The project was jointly led by myself and a colleague (Garside et al. 2009). 'Choice', along with all the assessment methods that were on offer will be further discussed and critically analysed later in this chapter. The outcomes for both modules are identified in text box 7.1 and 7.2.

Text Box 7.1 Assessment care and management of the acutely ill patient module outcomes

Knowledge and Understanding Outcomes

1. Critically analyse aspects of disordered physiology, principles of accurate physiological and homeostatic measurement in relation to the care and management of persons suffering acute deterioration of their condition.
2. Critically examine the contribution that recent developments and current research in the care and management of acutely ill patients can make to the delivery of high quality care.
3. Critically analyse provision of holistic care by the multi-professional team for the acutely ill individual with due consideration to evidence based practice.

Ability Outcomes

4. Critically appraise and demonstrate safe, competent practice of the role of the health practitioner in the assessment, care and management of the acutely ill patient and justify the need for accurate record keeping.

Text Box 7.2 Professional principles underpinning clinical practice module outcomes.

Knowledge and Understanding Outcomes

1. Debate the influences that inform current health care policy, provision and practice.
2. Critically appraise the role of the practitioner within integrated service provision in the context of multi-agency and disciplinary working practices.
3. Critically analyse care provision demonstrating an awareness of current political and moral philosophy, agendas, financial implications and constraints and social expectations.

Ability outcomes

4. Critically apply professional principles and legal and ethical theories within acute clinical practice.

7.2 The clinical practical exam/OSCE

The most appropriate tools for assessing the *Assessment care and management of the acutely ill patient* module outcomes was the source of much debate during the planning stage of the course. The focus was to provide an accredited theoretical course where students could work towards a degree through a platform that enhanced clinical competence and enabled students to care competently for acutely ill patients. A manager subsequently defined what seemed to be the challenge:

“I don’t go by what people can write down; I go on how they can relate it to practice. It is the putting it into practice that obviously means more to me as a ward manager and the patient and you want to know that they know how to do it and they can actually physically do it as well as understand it”. Marcy

The debate was about whether the assessment should take place in clinical practice and if so, the question of who would be the most appropriate judge of the student’s competence? Because the course was so new, there were not former students who might be a suitable option to assess competence and there was no case law by which this might be measured. A reasonable compromise therefore seemed to look at alternatives and the consensus was that the OSCE had perhaps the most to offer.

The OSCE method of assessment was pioneered within medical education (Race et al. 2005). In its traditional form it consisted of multiple examination stations that require examinees to demonstrate through simulated clinical procedures, a level of competency within a specified time at each station (Brosnan et al., 2006). On the acute illness course the OSCE was adapted, comprising a single station utilising SIM MAN® (Laerdal Medical) was used (Perkins, 2007).

The OSCE afforded the opportunity for the student to apply their knowledge through a simulated clinical examination that aimed to closely represent clinical practice. As is chapter six reports, the students had already gained prior experience and developed their confidence within the simulated environment. Given their familiarity with the technology, it seemed reasonable that this is being employed for the purpose of summative assessment. Discussions during the planning of the course had concerned the feasibility of grading the OSCE. The conclusion was that this was of dubious value and that pass, refer or fail decision based criteria denoting safe practice was a logical way forward. During the OSCE the student was expected to use the ABCDE mnemonic to assess the simulated patient. Appendix fourteen provides an example of an assessment question and the accompanying marking guide. A manager's view of the OSCE was:

“Yes and even if you bring like scenario exams getting them to make the right decisions and please ensure they don't compromise any bit in the management and things needed to look after a poorly patient”.
Marcy

As with the simulation teaching sessions, the apprehension students reported was a prominent theme within the student feedback given did students appreciate that the OSCE when used as an assessment tool, also acts as an effective learning device. The common position was summarised:

“The simulation one (assessment) was nerve racking ... absolutely nerve racking although it was good as I surprised myself what I had picked up that was down to the teaching and learning methods and the simulation scenarios that we had had the clinical ones that helped with my exam. But that was good; it was a change from the usual essay”.
Salle

“The scenarios when you are actually being assessed is the most nerve racking thing ever”. Sharon

“I enjoyed the scenario, at the time it was oh my ... I have never felt like that before but I did enjoy it once I got sorted and settled”. Sage

The students appreciated the encouraging milieu that was provided by the lecturers through non-verbal support such as nods and smiles and thus providing ‘social reinforcers’ of learning (Hinchliff, 2004; Hand 2006). This tacit support adequately encouraged the students’ expression of self-confidence without skewing the result of the assessment. The usual student response to this was:

“I thought the simulation exam was a lot better than I thought it was going to be, it was right scary thinking about doing it but I think because you are all right friendly and approachable it kind of puts you at ease when you go in again it was quite informal but you still did what you needed to do ... so that was alright”. Sada

Acute clinical practice can be extremely stressful and the RN needs to be able to perform effectively within the frenetic circumstances of the acute clinical emergency. Simulation was identified as a stressful method of teaching and learning, although it was that by simulating stressful events, students become better prepared to deal with them in the future. This was identified as follows:

“It’s just so nerve racking. It is an acute illness course and we are going to be doing these things in real life so it’s important that we can do it and do it right”. Scott

“... although it is a false situation, it does make you think I can do this and it’s a step by step logical thing that you can transfer direct to your patients that you are looking after so I liked that”. Sandy

Samantha discussed her experiences of the OSCE:

“Yes I found it good, it was a really good way of doing it and like it just makes you think about your ABCDE, so you break things down and look at them individually, you are less likely to forget things if you do it like that ... and it gives you a bit more confidence showing that you do actually know, and do it rather than just writing it down and you see things that prompt you rather you have just got a piece of paper that says you know what to do in this situation”. Samantha

7.3 The portfolio

Part two assessment for *Assessment care and management of the acutely ill patient* module was a 6000 word portfolio that required the student to collect evidence of learning and demonstrate critical reflection on their alternative placement visits. Students were also expected to make intellectual associations between what they had read and learned and what they were seeing and doing in practice and to generally analyse and locate the place of evidence based practice within acute care.

A portfolio is described as a collection of evidence and of the products and processes of learning and a tangible record of what someone has done (Redman, 1994; McMullan et al., 2003). The portfolio generated within the alternative placement contained a variety of evidence in support of the learning outcomes that were chosen by the students resulting in the presentation of widely differing types of evidence resulting. Too much information can create an unwieldy collection of documents that only the owner can decipher and so a common synopsis of 6000 words was required from each student to clarify the purpose that the portfolio had served (McMullan et al., 2003).

Bradshaw (1989) argued that portfolios along with journals and diaries are not in themselves a method of assessment but are a means of recording a variety of evidence that can be contributory to the overall assessment result. The portfolio can demonstrate a wide range of student ability, including: skills, attitude, personal qualities and achievement as well as attainment of knowledge and ability outcomes. Within the acute illness course the portfolio aimed to draw on evidence and its application as an alternative or addition to examinations or essays to adequately reflect a wider range of achievement and experience. A student reflected bore this out as follows:

“I enjoyed doing my portfolio because it was a variety of things that I had to put in even though it was hard work, it was better than having to sit and write a 6000 word assignment, I think because it was individual pieces of work ... I had four reflections that I put in ... but it was interesting to do them because you could see what you had learnt and what you had picked up from your various clinical placements”. Sari

Brown et al. (1995) also described the personal portfolio as a private collection of evidence, which demonstrates the continuing acquisition of skills, knowledge, attitudes and achievements and the variety of this is able to expose and this was pertinent to the students impressions as indicated by the following:

“We appreciated the variety involved with the portfolio, looking things up and putting them all together and arranging it ...” Sada

An effective element within the use the portfolio as an assessment method was its applicability to students’ personal learning needs. For example, if a student wanted to advance particular interests these could be accommodated by the portfolio, something verbalised by the following:

“It was really good because it is specific to me and my unit and if someone else from my unit comes their portfolio will still be very different because those were things that I wanted to look at and things that I felt I needed to look at so that was nice that I could tailor something specifically to what I wanted and needed”. Sandy

“I did a critical analysis of DNR (do not resuscitate) so that was interesting delving into other areas and finding out what actually was out there regarding DNR. I even managed to do a mini audit on the ward regarding DNR so that resulted from my studies. It was something I had noticed while I’d been working but obviously the course has sort of helped me it pushed me to do the audit, I mean I probably wouldn’t be able to do it otherwise”. Sarah

The portfolio is a heuristic learning device that capitalises on experiential learning and seeks to provide a rationale for the student’s actions (Murrell et al., 1998). In addition the portfolio was identified as being a useful tool not just for the students but for other members of the clinical team and students used their portfolio as a resource to share their work with other clinical colleagues that was described as follows:

“... it just gets everything together, it looks at that one specific topic that you have obviously got an interest in or that you have looked at or that wide scope that you want to look at and it gives you the opportunity to just bring it all together and make it stick in your mind and make it usable on the ward and take it back and use it as an education tool and for something for people to just dip into if they are struggling a little bit. I took mine in and left it on the ward and there are loads of situations and things in it”. Scott

“... the portfolio I think I will refer back to it, I tried to put in their little points to remind me about stuff, you know future references about things like gases, like the using the steps to ABG's and same for ECG's”. Sally

Gannon et al. (2001) recommended for portfolios to be successful that it is important that the student is provided with clear guidance on the contents and outcomes. A previously identified strength was precisely the structure portfolios provided concerning students particular learning needs. Yet some students preferred to have more direction and for them the portfolio was not entirely straightforward as captured by the following:

“The portfolio was good because it was specific to me, but I must say I wasn't quite sure if I was doing it right and I kept thinking it can't possibly be right because it's about me ... so that was my hang up”. Sandy

“I don't think we really understand what we needed to put in it because we're saying like don't know what to put in it but as the course goes on and you start it you get on a bit of a roll ... yes but that was the point made at the start when they said that everyone's will be completely different”. Sada

McMullan et al., (2003) identified that a deficiency using portfolios for summative assessment is that students might lack ownership of them in ways that doesn't occur with other vehicles of assessment. This however, was not for participants as one said:

“I liked it, I got right into that ... I don't know I just really liked it, you know what you need to get in it but I think you can put your own touch, I liked being able to relate it to work and doing case studies and then being able to look at all different parts of the case study, I really liked that”. Saul

A concern with the portfolio was the word count and content. Some of the students embellished their work with copious supportive documentation, such as policy documents and articles relating to their reflections. Others provided a minimal accompanying literature and this is perhaps a feature of the flexibility that this technique brings to the students learning experience through its use.

7.4 Choice of assessment method

Within the *Professional principles underpinning clinical practice* module, the students were expected to meet the knowledge and ability outcomes within a chosen sphere of interest arising in their clinical practice. In recognition that students have individual strengths and weaknesses and that learning styles and preferences are idiosyncratic matter, an element of choice within the scheme of assessment was introduced in 2007. The literature had suggested that choice improves the overall quality of assessment yet that being said no evidence was found within this study that confirmed this assertion (Race et al., 2005; Cowan, 2006; Garside et al., 2009). While accepting the inherent imprecision with any assessment technique, the assumption was made that giving students choice would provide them the option of how best they believed they could articulate their learning.

Course evaluations generally in the School indicated that students thought themselves over assessed and there was an over dependence on essay and or examinations as the only means of assessing knowledge and in some instances, an overreliance on them for assessing practice. A departmental project proposed to undertake a pilot scheme offering a choice in the mode of assessment within the module in two different programmes. One example was a module from the pre-registration undergraduate programme and this experience of student choice was evaluated using a questionnaire. The second module was the *Professional principles underpinning clinical practice* module. This evaluative work concerning choice within this module coincided with the inception of this study evaluated the exercise through the study's methodology.

On commencement of the project conservative concerns were raised at institutional level regarding the inclusion of choice of assessment in a module specification. The main reason for this did not concern pedagogy but rather the anticipated inflexibility of the electronic system used to track a student's grades and progression. This however, was overcome the following module specification that described the assessment strategy:

The student will achieve the learning outcomes of this module in negotiation with the module leader. The outcome of these negotiations will be documented in the form of a learning contract. The learning contract will require the student to produce a 4000 word essay or equivalent.

The students were given the opportunity to adopt a variety of assessment modes and were supported to be as creative as they would like to be. Choice of assessment methods gave ownership and responsibility to the student to decide which method best suited them. The negotiation process included a discussion of learning style during tutorials. To ensure equity between students, the module outcomes and the marking criteria used were standardised irrespective of method of the assessment that was chosen.

The monitoring and moderation ensured all assessment methods chosen by students met the University requirements regarding the 4000 words or equivalent for each honours level 20 credits. On embarking on this journey there was no preconceived notion of what mode of assessment would be the most popular for the 34 CPD students who have completed the acute illness course and been given the choice of assessment methods. The students chosen assessment type can be found in Table 7.1.

Students that chose a teaching package accompanied it with the assessment methods to meet either the module outcomes or the 20 honours level credit can be found in table 7.2.

Table 7.1 Assessment methods chosen by students on the acute illness course involved in choice of assessment methods

Negotiated assessment method	Number of students
4000 word Essay	8 (23.6%)
15 minute Presentation and 2000 word supporting essay	11 (32.3%)
Poster and 2000 word supporting paper	1 (2.9%)
Teaching Package	15 (44.1%)

Table 7.2 The number of students that chose teaching package with other methods of assessment:

Teaching Package (total 4000 words)	7 (20.6%)
Teaching Package (2000 word) and 2000 word essay	6 (17.6%)
Teaching Package (2000 word) and Presentation (15 minutes)	1 (2.9%)

Twenty-seven (79%) of the 34 students that were given the choice of assessment methods selected the essay. This took a variety of formats of either 4000 words as a total assessment or, 2000 words to support an alternative method of assessment, such as a teaching package. The second year pre-registration students involved in the project were given a choice of a limited selection of assessment methods, the essay, the exam or the presentation. Essay, again reflects their CPD colleagues' choice of essay as the most popular choice as 93.5% selected this option, 4.4% opted for the presentation and 2.3% preferred examination (Garside et al., 2009).

7.4.1. Students views of being given a choice of assessment methods

Allowing students the choice of assessment method and their experiences of it was investigated. Once students had reflected on the change to the usual predetermined assessment strategy, overall the majority of students welcomed it with comments such as:

“Mmmm at first it was like oh ... what do I do! It did take a bit of thinking about ... about what I want which in itself is good as it makes you think why am I here and what do I want to achieve, so yes it was a bit of a ... well we've never been asked before”. Sandy

“It was really nice to be given the opportunity to choose an assessment method as an adult learner”. Sophie

“I enjoyed having that choice and it's good to have to do something different like the teaching and learning pack rather than having to do a 4000 word assignment”. Sandy

The flexibility of choice of assessment provided a challenge for some students', in whom it provoked indecision as follows:

"I don't like choice; I can't make a decision to save my life. I want the simplest method ... because I tie myself up in knots and make it more complicated, if someone said to me right, you need to do a poster and an essay and I would go alright then". Samantha

7.4.2 Relationship to practice

A clear beneficial outcome of the choice of assessment methods perceived by students and the managers was its relevance practice. Choice gave students the opportunity to identify on the job challenges and they were able through assessment, to create a product that sought to respond to them while simultaneously meeting the academic requirements of their course. This was expressed as follows:

"I felt it made the course more applicable to my practice and I believe I achieved something useful as a result ... not just an essay that will be filed in a drawer". Sophie

An example of a creative approach to the assessment produced resulting from choice was an informative poster produced by Sana for her ward. The poster presented Sana's ward cannulation audit and the evidence-based cannulation 'best practice' and visual evidence of the poor results that came out of the audit, that were subsequently exhibited on her ward of which she said:

"With my poster about infection with cannulation I am glad that the ward got something out of it, like when I did the poster and that got taken back to the ward ... I thought that was really useful". Sana

Educational tools, either teaching sessions or teaching packages for other clinical colleagues were very popular choices for students:

"The actual presentation that I did is actually going to be used, in fact it is going to be used next week for the first time, that's quite useful and off the back of it we've got an unit study day where we have got about five presentations being delivered in a day for our newly qualified staff so it's come up trumps really". Sharon

"I did a teaching package on carotid endarterectomy patients because those were the ones who were extending their stay, traditionally we had them for half an hour and then they were back to the ward so then we were like oh what do we do after half an hour, so that was really good

now most of the recovery staff are doing what we should be doing with these people so we are improving care ... which is fab". Sandy

7.4.3 Achievement

Due to the small numbers of the students, no viable results were available to demonstrate if choice of assessment had any influence on the grades that students achieved. Although, they variously identified choice as providing the potential to improve their grade as follows:

"Obviously there are people out there that are no good at presentations they can probably write a 6000 word assignment and it's an A and on a presentation they might get a C or something". Salle

"I felt that having the choice of assessment was a very good idea ... giving people the opportunity to fulfil their potential in the assessment that they prefer". Shannon

"I know that myself I don't like doing presentations so I don't feel confident so I know I wouldn't enjoy it and I would feel that I would get lower marks for doing it, so I wouldn't like to do that". Saul

A positive experience of assessment was reflected on by Sam. Her successful assessment outcome gave her a real sense of achievement:

"I was proud of myself, I was really really proud of myself because I passed them with quite good marks ... to go from a ward where I wasn't really happy and having my confidence knocked all the time to come here to show I can do it and I have got the abilities to do it I was really really pleased with myself and proud of myself ... it's one of my greatest achievements to date in fact!" Sam

The students' intellectual ability and academic self-concept are quoted in the literature as independent variables within student achievement, so that a student with high ability but with low academic self-concept may not perform well educationally and this is manifest in the weaker performers though less in the way of critical analysis within their work (Gibbs, 1995). This was confirmed to some extent, to be the experience of some students who said:

"It's just the critique, I struggle with critique ... it is very easy to be critical of something and saying it hasn't got this but it is not as easy saying it does this and it does that you know I find it quite hard to critique and looking at other things that are out there and comparing it to what you have got in front of you". Samantha

“I am more descriptive rather than critical I can say like my opinions but I don’t like getting other sources in and say this says this and that says that”. Sana

The nature of some assessment modes and that many students found description easier than analysis was recognised by the module team early on in the choice of assessment project. Students were thus made aware of the generic marking criteria (Appendix thirteen) and the requirement to meet them to gain higher honours level grades. Therefore, many students chose to support descriptive tasks, such as educational tools with supportive critical reviews in an essay format. The overall dilemma concerning criticality within their work was summarised succinctly:

“Folk have different strengths and different weaknesses so I think if you know you are going to fall down in one area you can get really good marks in an area that you are good at, it picks you up you don’t get quite as fretful”. Sage

7.5 The essay

Prior to the adoption of ‘choice’, the assessment for the *Professional principles* module incorporated a compulsory 2000 word essay along with a 15 minute presentation. An essay up to 4000 words was an element of choice, which has been identified previously as a very popular assessment method. The essays assessed the students’ comprehension, and the ability to integrate and synthesise, including the ability to apply information to new or given circumstances. McKeachie (1994) proceeded to defend essay writing as an art in itself that is something in which those with weaker academic backgrounds and a lesser linguistic ability are disadvantaged. This was something that was not unknown within the course and this was addressed by assisting the study within remedial study skills classes. An increasingly prevalent occurrence with the essay is plagiarism that is an inevitable consequence of an electronic age. No guarantee can be given that the work produced is the student’s own words, although software is now available to support identification of this.

Students’ choosing the essay, described how they found it a familiar and comfortable form of assessment. Others recounted avoidance strategies

whereby they chose the essay as a means to avoid exposure to the perceived stress of other assessment methods, such as the oral presentation that was variously described as follows:

“I choose the assignment, because I didn’t want to do a presentation!”
Sada

“I am not a confident public speaker therefore appreciated the option to express my ideas in essay format”. Sarah

Sean preferred essays and believed that other methods such as presentations acted adversely on his marks. The literature supports this describing how written assessments result in a better student performance (McKeachie, 1994). This was something that coincided with an account that said:

“I have never liked doing presentations and feel in the past this may have meant that I had lower marks”. Sean

In addition, even with the most stringent, detailed marking criteria, the reliability of an essay may be compromised by the subjectivity of or inconsistencies in grading by the assessor. Essays take a great deal of time to be marked objectively as demonstrated during marking workshops resulting in the same essay having allocated very different marks despite very strict marking criteria (Race et al., 2005).

Yet overall, many views of the essay were positive. This was, however, a single sided, partisan view and a limitation of the study as the following comments mainly from the students who had chosen essay as their assessment method:

“I like essay writing so I enjoyed that, I like the reading and research it entails”. Sada

“Yes I liked it and I thought that because it was 4000 words it you get into it, if you are doing all that research and spending so much time, I think you get into it and you can explain in more detail and go down different routes like talk about different things, that are all related”. Saul

7.6 The presentation

A fifteen minute presentation was required to give the student 50% of the module marks. Many students discussed their subjective experiences when

describing the presentation as an assessment strategy that for them ranged from an extremely stressful event to something they really enjoyed. This was summarised thus:

“... the presentation although it is absolutely petrifying having to do a presentation I also enjoyed that because it’s nice to tell other people about your findings”. Sam

“I found them all really interesting and I did enjoy the presentation but I do quite like presentations, so I did enjoy it”. Sage

“I don’t mind presentations too much I don’t particularly like doing them and I don’t think many people do”. Sari

Sophie discussed her perceived poor performance during presentations:

“I am not very good with presentations ... I can’t put myself up at the front and stand and talk”. Sophie

Although a stressful event, some students choose the presentation as a method of assessment because they identified being able to sustain a verbal dialogue as something of a contribution to their own personal and career development. An example was:

“I felt I needed extra practice at my presenting skills to build my confidence when speaking in a group”. Shannon.

The assumed challenge of assessments might have an effect, albeit one that is unquantified, on the recruitment of CPD students as illustrated by one who said:

“If I wasn’t given the choice that had a bearing as to whether I would have done the course or not. That’s how much I hate doing presentations ... I never got used to it and it got to the point of being too stressed I just can’t ... and yes I do, I look at doing courses and if that is the main assessment method, I wouldn’t do the course”. Sada.

7.7 The mixture of methods

The eclectic mix of assessments was something that students acknowledged to be helpful as follows:

“So I think the way we were assessed was ideal for most folk I would imagine and from my point of view it was interesting in every way. It made sure my strengths were picked up upon and weaknesses built back up really”. Sandy

“I think they were all particularly useful; I enjoyed all of them from different points view. I think we were given a lot of choice of subject areas which were good because we didn’t all work in the same area anyway and we got quite a variety ... I mean obviously nobody likes to do assessments they are stressful but it’s all part of it”. Sally

7.8 Discussion

Nicklin (1996) believed that a sound assessment strategy will employ a number of methods to provide a comprehensive summation of the students’ ability and attributes that will be achieved through techniques that address the intended learning outcomes that have been set. The acute illness course applied an eclecticism to the task with assessment elements that were integrative, allowed the demonstration of the students’ capability to question and to critically reflect on the rationale for the course that was the better care of the acutely ill patient. The subjects of the assignments were broad and individually negotiated allowing the student to explore topics that related to their clinical need and speciality, that were relevant, thought provoking and encouraged the student to become self-directed. Effective assessments incorporate methods that provided students with the opportunity to demonstrate the learning that has taken place (Lambert and Lines, 2000). The assessment feedback process was an essential and integral element of the assessment procedure that nurtured learning by guiding students on how they might improve their technique but also on complementing them on what was good about their work. Feedback encouraged the student to assimilate the comments of the marker so that these might inform their future learning development in both academic and practice settings.

Allowing a choice of assessment methods was well received once the student had become accustomed to the flexible nature of the approach. Students identified the inherent benefits arising from choice in that it accommodates individual learning styles and has the added value of enabling the student to take something back to clinical practice to benefit their whole team. The stresses and pressure exerted by the ‘high stress’ methods such as presentations emerged as being a significant factor in influencing students’ preferences. In addition, this optionality required students to be decisive and

autonomous and it was thought to be no bad thing given that these skills are ones they needed to develop and are one's they require when caring for the acutely ill patient. Students believed that choice gave them the opportunity to achieve improved grades although no evidence justifying this claim was apparent. The greater use of choice across programmes should however, provide further insight regarding the effects of self determination on overall performance.

Lack of validity is often an argument used to question the use of choice within a diet of assessment. Giving students alternatives needs to be used with caution and careful consideration needs to be given about whether these options are accurately testing the learning outcomes of the module. While the goal of enhancing student autonomy that flows from allowing students a preference is entirely laudable and is entirely consistent with adult learning paradigms, this has to be weighed against the appropriateness of the alternative assessment topics they select. Indeed there are instances when the student has to demonstrate a very specific knowledge where giving alternatives is unsuitable. That said, if module/course learning outcomes can be assessed by a variety of assessments then the introduction of choice seems entirely appropriate and consonant with theories of androgogy.

The OSCE allowed the CPD student to demonstrate applied theory, safe practice and competence when assessing an acutely ill patient. It attempted to be as authentic as possible within the limits of the simulated clinical environment while recognising that it is not a replacement for the 'real thing'. The OSCE provided a reliable and valid assessment method with which to judge the safety of the students' clinical performance. Despite the unavoidably contrived nature of the OSCE, the students recognised the transferable skills dimension of the exercise and they felt better equipped by its content when they encountered similar challenges within their own practice.

One of the managers questioned the rationale for the students whom she regarded as busy professionals who had to produce written work to show what they had learned despite having acquired the necessary skills in practice placements. As she put it:

“When you are learning on the job you feel like you have learned all you have to do and know like in practice how to analyse blood gases and look after patients on NIPPY whereas then you don’t want to have to go and write an essay about it”. Mary

This led to discussions within the course management team on what was the best means of assessing this aspect of the course and whether there were rigorous alternatives for assessing practice knowledge? Consideration followed on the possible use of an oral examination or the *Viva Voce*. The *Viva Voce* is a tried and tested vehicle for assessment that can enable students to demonstrate learning in practice in a way that is less time consuming than more traditional methods. The necessary safeguard to ensure the reliability and validity of the *Viva Voce* is the way in which inter-rater reliability so established therefore, all students are treated fairly.

A recurrent theme throughout the study findings were the psychological consequences of the learning and assessment styles. Subjective discomfort and stress has been particularly associated with simulation as both a teaching and assessment strategy. The following section therefore, will investigate in further detail the emotional influences of learning and assessment, particularly in relation to simulated learning.

Nursing is by its very nature an occupation that exposes its parishioners to stress (McGrath et al., 2003; McVicar, 2003). The RN caring for the acutely ill patients is on a daily basis being exposed to fast-paced, stressful clinical environments. In addition these students were by definition, mature individuals who have a considerable amount of emotional capital and self esteem riding on their success. It therefore, seemed highly reasonable to examine in some detail, the effects that stress might exert on the students through their formal assessment and indeed, it was a recurrent theme

throughout the study findings as were the psychological consequences for both learning and assessment. The former students expressed a variety of positive and negative emotional responses to the different teaching and learning strategies. These factors were features of several aspects of the learning processes, such as speaking up in class and giving presentations and the anxiety provoking responses were particularly highlighted in the discussions about simulated teaching and in the simulation dimensions of the assessment scheme. Students reported a variety of subjective views that were variously defined to be 'scary' or 'nerve-racking'. Yet simulated learning and assessment evaluated overall as a very positive and valuable learning experience with comments such as, "daunting ... but a good experience ... really good".

The physiological effects of an emotional or 'stress' response is a result of the neuro-chemical release of the brain enzymes and ultimately the stimulation of adrenaline production in what is widely known as the 'fight or flight' response (Tortora and Derrickson, 2006). It is argued that negative 'stress' events can result in a convoluted set of cognitive, affective and physical or behavioural responses that are individual in nature depending on a person's perceived capacity to deal with that event. Some examples of cognitive and affective responses to stress range from an inability to concentrate, moodiness, irritability, agitation to severe depression. Stress may result in physical responses such as sweating, nausea and vomiting, irritable bowels or an increased cardiovascular response which may in the extreme, precipitate symptoms such as chest pain.

The subjective experiences of the fear of the unknown, apprehension and overt anxiety are closely related to many aspects of the learning and assessment procedures and so it was necessary to be aware of this within everyday conduct of the course (Schutz and Lanehart, 2002). The incidence and presentation of these and similar psychological sequelae in teaching, learning and assessment are a significantly under-researched matter and an understanding of their influence on overall learning is minimal (Boud and

Falchicov, 2007). Dirkx (2006, p.16) argued that “relatively few scholars and practitioners in adult and higher education regard emotion as integral to the meaning-making process of teaching and learning”.

The detrimental consequences of adverse psychological experiences have been alleged with the suggestion that if a student is anxious, worried, uncomfortable, or afraid they will not learn and the ‘anxiety provoking’ learning experience may have long-lasting consequences for the student who may experience feelings of powerlessness and lack of self-belief (Perry, 2006). Furthermore, students who have had a negative experience may engage in avoidance that may ultimately reflect negatively on motivation and performance (Struthers et al., 2000). It has been proposed that these psychological sequelae can threaten the validity of an assessment strategy and that test or examination anxiety can reduce memory, leading to impaired performance in demanding tasks that need to be demonstrated (Hembree, 1988). Folkman and Lazarus (1985) identified that students manage negative or threatening events in three stages; firstly, primary appraisal of the threat, secondly, by bringing to mind the potential responses that can be made and finally, by the execution of coping responses.

Yet it seems a reasonable assumption that although these psychological effects will be an inhibitor of learning for some students while for others they may act as a motivator because the students’ fear of failure drives them on. This observation has been reinforced because it has been claimed that this emotional dimension within teaching, learning and assessment may generate inspiration and create a purpose for learning and achievement (Dirkx, 2006). Struthers et al. (2000) analysed the intricate relationship between students’ stress and achievement and the high achievers were characterised by their adaptable coping styles as well as by their motivation.

The seemingly arcane ‘Yerkes-Dodson Law’ is illustrative within this debate. It dictates that performance increases with physiological arousal, but only to a point, as when levels of arousal become high, performance decreases.

Similarly what inventors called 'eustress' in relation to 'distress' is a positive form of stress which can enhance performance conversely, distress may have negative implications (Yerkes & Dodson, 1908). Pekrun et al. (2002) argued that simply linking negative emotions to bad outcomes and positive emotions with good outcomes should be avoided, since positive emotions are sometimes detrimental and negative emotions can be beneficial. A balanced and illuminating set of assumptions suggest that anxiety or fear could have a positive effect on the learning process, while other emotions, such as anger or arrogance and overconfidence often have a negative effect where students think they already know what they need to know and deny their need further learning experiences (Boud and Falchicov, 2007; Shuck et al., 2007)

The emotional responses of students involved in simulation learning methods may be attributed to the fact that emotions "serve as filters, anticipating threats to self-image protecting self-esteem" (Shuck et al., 2007, p.110). Simulation triggers feelings of initial apprehension and the vulnerability of being exposed and having to perform in front of their peers. The students' perceived capacity to cope with such events may play a central role in their emotional response (Struthers et al., 2000). As the simulation sessions progressed week after week, students reported that they began to value and enjoy simulation as a learning method. This occurred when they became familiar with the facilitators and they become comfortable and less threatened with the simulation environment and processes. Overcoming the initial exposure allowed the students to gain experience demonstrating that their learning experience would not be humiliating or detrimental. This in turn allowed them to relax, therefore, turning the event from a perceived threat to a valuable learning experience. Indeed, a moderated fight of flight response, may find the 'stressed' student more attentive and responsive to non-verbal cues such as "tone of voice, body posture and facial expressions" (Perry, 2006, p.24).

This gamut of psychological experiences were reflected in the data that is highly resonant with the above literature in that the emotional consequences

of assessment are multifarious can vary so much from person to person. There were instances where a student was sufficiently anxiety prone that she would not participate in any course or module activity if the assessment method required an oral presentation. There was also the polar opposite, where positive experiences described by a student were her 'Greatest achievements to date!'

This chapter has presented the exploration of the variety of assessments devices that provided a rounded view of the students' performance and capability (Eraut, 1994). The chapter has in addition, sought to analyse the unintended stressful effects of assessment on some students. Assessment affords the student the opportunity to demonstrate their knowledge and subsequently gain feedback and to transfer and apply learning into their acute clinical practice. Chapter eight will present the findings of the participants' perceptions of how the acute illness course, in whole, impacted on their clinical practice development.

Chapter Eight Findings: Staff Development

8.1 Introduction

This chapter will present findings that relate to the study's participants' perceptions of the explicit and implicit competence-related learning that they were able to demonstrate as a consequence of the acute illness course. This will be explored for evidence of what knowledge and skills transfer had occurred between the course content and its competent application to the students' clinical practice.

Measuring the outcomes of this, or indeed any CPD learning experience, will inevitably be a contentious activity because of the multifarious factors that shape a practitioner's competence such as their learning style, previous clinical experience or their prior level of psychomotor ability. The literature has repeatedly confirmed that reliable empirical evidence on the outcomes of CPD activities among health care practitioners is notably scanty.

8.2 Practitioner development

Simply asking the participants if the acute illness course had been beneficial could have easily become a leading question that elicited the response they believed was being sought. In consequence, a more subtle and less direct means was taken with the aim of securing more reliable responses that could then be analysed to unearth their deeper meaning. The former students were encouraged to identify if the course had influenced any domains of their practice and if so how? In turn, their managers were invited to present their impressions on the same question. All participants were encouraged to provide examples or stories to demonstrate their own interpretation of events and this was intended to expose experiences that would add to the richness to the findings of the study. Kenyon and Randell (1997, p. 65) identified a story being the most basic element of a narrative which involves "someone telling someone about somebody doing something ... and what happens to (them) as a result".

Students identified that their practice developed through a greater understanding of clinical practice as a result of increased knowledge which supported their practice. One explained:

“I had one of the nurses on the ward asking me about the course because they were interested in doing it next year, she was asking me what I got out of it, she qualified the same time as me ... so I was explaining to her my clinical skills have definitely improved. I just explained that you have more of an understanding of situations like at an arrest situation, fair enough we can't give drugs and intubate or anything like that but you understand the process of why things are being done that way and what's happening, so you can be prepared for what doctors are going to ask for next ... it has given me so much more confidence”. Sally

Another added:

“Definitely the academic knowledge because it clarifies it, it puts it into context it puts in academic sense of if you are looking at the systems of the body why it works, why it fails and what you do about it that was really good. It explains why we do lots of things and explained how we treat certain things so from that point of view definitely”. Sharon

8.3 Confidence

In like vein, when other former students were asked how their practice had changed as a result of the course, their responses often referred to an increased confidence in their ability to care for the acutely ill patient and examples of which include:

“I have learned to approach a clinical situation with confidence to manage situations using the correct approach enabling me to give the correct treatment quickly and efficiently”. Shane

“This is a great course for anyone who works in the acute environment to go on ... it gives you knowledge to take back and also more confidence in your clinical environment”. Sef

“It has helped me develop myself personally and professionally. I feel a lot more confident at work and colleagues have praised me which I am grateful for thanks to this course”. Scott

“The course helped me to approach a clinical situation with a new found confidence to manage that situation, using the correct approach enabling me to give the correct treatment quickly and efficiently”. Sari

On further exploration, some accounts that were provided further demonstrated how the former students' confidence had improved. For one, this included the positive feedback by other senior clinical colleagues:

“... I felt more confident because ... I remember we had a patient who needed intubation and was going to ICU and I was looking after him and I just started doing stuff and sister said “oh look at you acute nurse”, you know so I felt like some people were noticing, and we had a lot of acutely ill patients so I felt a lot more confident”. Saul

As a result of increased confidence, Sarah demonstrated the ability to identify and problem-solve and communicate more confidently:

“... and now because of the course I have gained more confidence in challenging the doctors, for example why hasn't this gentleman or this lady got a DNR form in? ... she has got all these co-morbidities ... So that's given me a bit more confidence”. Sarah

Confidence within this study was described as a state where the former students were more certain that a chosen course of action was the most appropriate for a given set of circumstances. Crooks et al. (2005) described professional confidence as an internal feeling of self-assurance and comfort. Mason-Whitehead et al., (2008, p.80) defined confidence as: “freedom from doubt; belief in yourself and your abilities”. Confidence within this study had from the students' point of view, an important part to play in the attributes that support the implementation of nursing care with the obvious safeguard that they needed to be aware of their limitations. The general belief was that the practitioner with confidence may show positive ‘self-confidence’, yet ‘overconfidence’ can be perceived as arrogance. Students emphasised that having confidence does not necessary mean that the person is competent and a person may be unskilled at a particular procedure yet still remain confident in their behaviour.

Confidence and competence are intricately linked to nursing and to its role in caring for others. Roach (1992) described attributes of human behaviours that characterise professional nursing practice as embracing ‘six C's; these being, caring, compassion, competence, commitment, conscience and confidence. By tradition and in the literature, nursing is unanimously the best

known 'caring profession' although, it does not have a monopoly in this regard. Compassion and the empathic nature of nursing defines the ability of to understand and identify with the predicament of others that is manifested through skills such as listening, counselling and taking a pastoral interest in patients. This is accompanied by a sense of conscience that relates to the moral awareness of diversity, equality and humanity towards others in general and patients in particular. Related to these qualities also is commitment that is understood as an intricate affective response which is described as the underpinning essence for nursing and of 'caring' (Mayeroff, 1971). In addition to this constellation of attributes, the RN needs confidence to provide efficient, effective and empathic care, and it is confidence that is the feature which fosters trusting and mutual respect within professional and caring relationships that has been explained as follows:

To care for someone, I must know many things ... I must know, for example, what the other is, what his powers and limitations are what his needs are, what is conducive to his growth; I must know how to respond to his needs and what my own powers and limitations are. (Roach, 1992, p.45)

8.4 Staff development and the managers' perspective

Similar findings to the former students' perspectives were demonstrated from the managers' interviews. Increased confidence in caring for the acutely ill patient was recognised as being the most significant change that had occurred to many of the former students'. This was described as thus:

"Yes they both became more confident and more forward thinking and particularly Sharon, she now thrives in a busy or critical situation it is like she has been given a lifeline she literally thrives on it when anyone is sick or anything going on". Megan

"Sal is now very good, and Saul is now a confident person and she is very good with really poorly patients". Maria

"Scott's confidence and leadership skills have vastly improved". Martin

Professional self confidence also enabled some former students to share the new knowledge that they had gained with other clinical colleagues which included more bedside teaching. Accounts included the following:

“They also shared their knowledge with other staff members, not formal teaching sessions but they go through things with people, they didn’t have the confidence to do that before and they have put things into files for people on the ward and of course we had copies of their work”.

Mandy

Some of the managers identified how they had observed palpable development in the practitioner’s ability, as a result of the course. One found that the former student on the ward she managed had developed and matured professionally in that:

“She wouldn’t have taken control of an acute situation two years ago, she would have been there but not in the front line and organising it and being a leader in that situation, she does now, she takes control ... she has now joined (another team) she has gone on a secondment so it has done her good, it (the course) has opened a lot of doors for her”.

Martha

Increased confidence reported by the students in their sharing of skills within teamwork was something that managers endorsed wholeheartedly with the following illustration:

“She is doing teaching sessions on NIPPY, and we are doing some mandatory training ... like ... giving blood transfusions, looking at basic renal impairment and respiratory conditions and again it’s good, it’s a good way of bringing back learning for the junior members of the team”.

Mabel

“I think it is a good idea for nurses to take it if they are not working in intensive care and working on a general ward I do think it increases knowledge and it gives them more confidence in their abilities and it is helpful to go and feed back to the ward as well so I do think it is beneficial and it’s enjoyable for them”. Martha

“She (Sari) has improved her practice better than expected; she is better at making decisions and shares what she has learned with others in her team”. Maggie

“They now both provide more effective and efficient care as a result of what they learned on the course”. Martin

Some managers identified however, that clear measurement of the practitioners’ development was limited and they attributed this to the part time nature of the course with comments such as:

“This is something that I find really hard because obviously when I did my course it was whole-time and you were away from your clinical area and people saw you development when you got back”. Marcy

“Part time courses ... I do find they (the students) gets lost within their own workload and it is very hard obviously on a day to day basis how they are utilising their course work and obviously if you are working closely with them you do see some changes but it is not as obvious as whole time courses”. Martha

The debate about the respective efficacy of the part time or full time courses is seemingly insoluble and this is compounded by the climate of austerity in which releasing staff for study leave is regarded as an unaffordable luxury. While dedicated full time study in any academic or professional endeavour has undoubted merit, there is also the contention that the intermittent release of students to take clinical courses enables the fuller consolidation and application of their new learning.

Former students, in harmony with their managers, recognised that their acquisition of new knowledge had influenced their attitudes and behaviours and particularly so, when working with medical staff. This was expressed as:

“I felt a lot calmer dealing with situations because I have that additional knowledge”. Samantha

“Yes I was a more assertive as well, asking for help because I recognised some things and I was a bit more assertive if you knew something wasn't right actually speaking up and saying that's not right ... or questioning a lot of it”. Sana

“... it goes back a bit to empowerment ... you know when you are speaking to the doctors, because you understand a bit more about things and you understand a bit about this and you can say look the early warning score is ...” Sari

8.5 Clinical competence

There was unequivocal evidence from the student participants that their competence had been enhanced through the course. A typical story was as follows:

“... I had a situation last week where I had to go to another ward because they were struggling with a patient, the doctors was at an arrest, my patient was terrible they had come over from (other hospital) half an hour before, the respiratory rate was sky high, she sounded

grotty, her chest was terrible, no oxygen or anything else so we dealt with it straight away while the doctor came, we gave her loads of oxygen, lets listen in (auscultate) he was in failure ... we did the ECG and I know I can read the ECG and say, right we are in fast AF with this patient ... we had dealt with the patient by the time the reg (registrar) had come down to the patient and he was stabilised by then. Before the course I wouldn't have had the confidence to say that ... I would have wacked him a bit of oxygen on but probably not 15 litres and I generally do now. But yes, it was just so easy and it followed the structure, all the things you've learnt, I knew what to do, exactly what to do straight away and I knew how to interpret what was going on. It wasn't just the ECG but I know what the effects are now and I knew that his cardiac output would be starting to trail, that's what happens when you get fast AF that's what I learned from the course ... That was a big thing for me that I got from the course the learning not the how to deal with it but the learning about what was going on underneath it all which I think was probably better than the things that you learn on a day to day basis ... And knowing what's going on ... if you know what's going on you can pre-empt things". Shane

This story captured the use of and application of astute clinical judgement and its form and content provide a number of messages concerning narrative research in that through telling the story, the respondent may reveal more than they think (Basford and Slevin, 2003). The study of narratives can capture what is universal about clinical or human circumstances and can reveal clinical understandings that might otherwise be taken for granted (Miller and Brewer, 2003). The above narrative illustrated how through the course, the student had acquired understanding and forethought as well as demonstrating clinical development that exerted influence on the care of this acute patient.

8.6 Learning outcomes

In terms of the most significant learning outcomes from their experience, the students cited several. Frequently acknowledged was the *aid memoir* 'ABCDE' that is as identified in section 6.3.1. Former students reflected on how using this systematic process influenced their clinical practice with accounts such as:

"I think it is more of the assessment of the patient, that helped me a lot and the most, I think you can use that for all patients you know not just (specialist) patients, you can use it for everyone so I think because I

know I have to go through my ABCDE that's what made me feel confident". Saul

"I think it is because you know what to say to the right people, don't you like if you are really worried about someone you work through your ABCDE, and get on the phone to outreach and tell them what they need to know rather than waffle and miss bits out". Sam

Other outcomes identified included advanced life support skills, ECG interpretation and a better understanding of the influence of arterial blood gases that were described as thus:

"My arterial blood gases I can sort of interpret them a bit better than I could, and that was despite 11 month before on the ward where I was doing them, I had not got time to learn the gases whereas the course has helped me, so now I can look and I can say yes he is acidotic yes his PO₂ is low". Sarah

"We have learnt how to manage the different stages in a cardiac arrest, a peri arrest and the ABCDE but it was all related back to the theory we have learned in class like rhythm recognition, blood gases and drugs". Sef

"I was presented with a patient that is acutely ill if the auxiliary comes to me and goes the obs are this, this and this I can turn around and say well have you tried this I'll come down and have a look, my assessments are better, rather than me sort of panicking and thinking right I better get someone senior I have now got the confidence and knowledge to do everything that I can do that I know of before I have to go and get someone else and say look this patient is doing this". Sue

A manager recognised how these individual skills combined with the new knowledge had been beneficial:

"... we have had (staff) that have been on the course have learned lots of things like ECG's and Gases ... especially with the non-invasive ventilation because you do respiratory failure and, so it is not just oh we are putting them on the NIPPY it is actually why we are putting them on the NIPPY and that it is going to blow off the CO₂ and you know that the pH will be lowered and the work of breathing will be reduced and they think about the anatomy and the physiology and sometimes, it is a case of that we put them on this mask the settings are here but we don't really know why and I think as nurses we should know why and what's happened ... Personally I like to know why this has happened and why has this patient gone into respiratory failure and the vast majority are COPD's they have been over oxygenated in the ambulance ... the combination of an infection and the pCO₂ is high and they are acidotic and just a couple of hours on the NIPPY and we have

reversed all that and that has been a lot of help, so that has been good and the whole package is good it has just been really good everyone of the (students) have enjoyed it". Mabel

8.7 Discussion

The RN requires the necessary knowledge and assessment skills to be able to recognise intricate problems and to be able to deal with them appropriately. The 'ABCDE' systematic approach was used on the course as an effective method to assess and prioritise the care of the acutely ill patient. This mnemonic was frequently found to be useful and was used in clinical practice by the study participants as a result of their exposure to it. As well as skills in assessment and observation, many of the former students identified that advanced life support skills, blood gas analysis and ECG interpretation were other key skills that they had taken away from the acute illness course that were highly valued. Carroll (2004) and Wood et al. (2004) in their training needs analysis within their acute care agree that these particular elements should be amongst the skills and abilities and these particular elements should be amongst the skills and abilities and these are integral to the delivery of effective care of the acutely ill in hospital settings. In like manner, it is contended that principal attributes within the nursing assessment of patients are observational skills to detect precisely when the acutely ill patient is deteriorating (Adhern & Philpot, 2002). This is becoming more of a prerequisite ability given that many more acutely ill patients are to be seen on general wards than in the past (NPSA, 2007a; NICE, 2007).

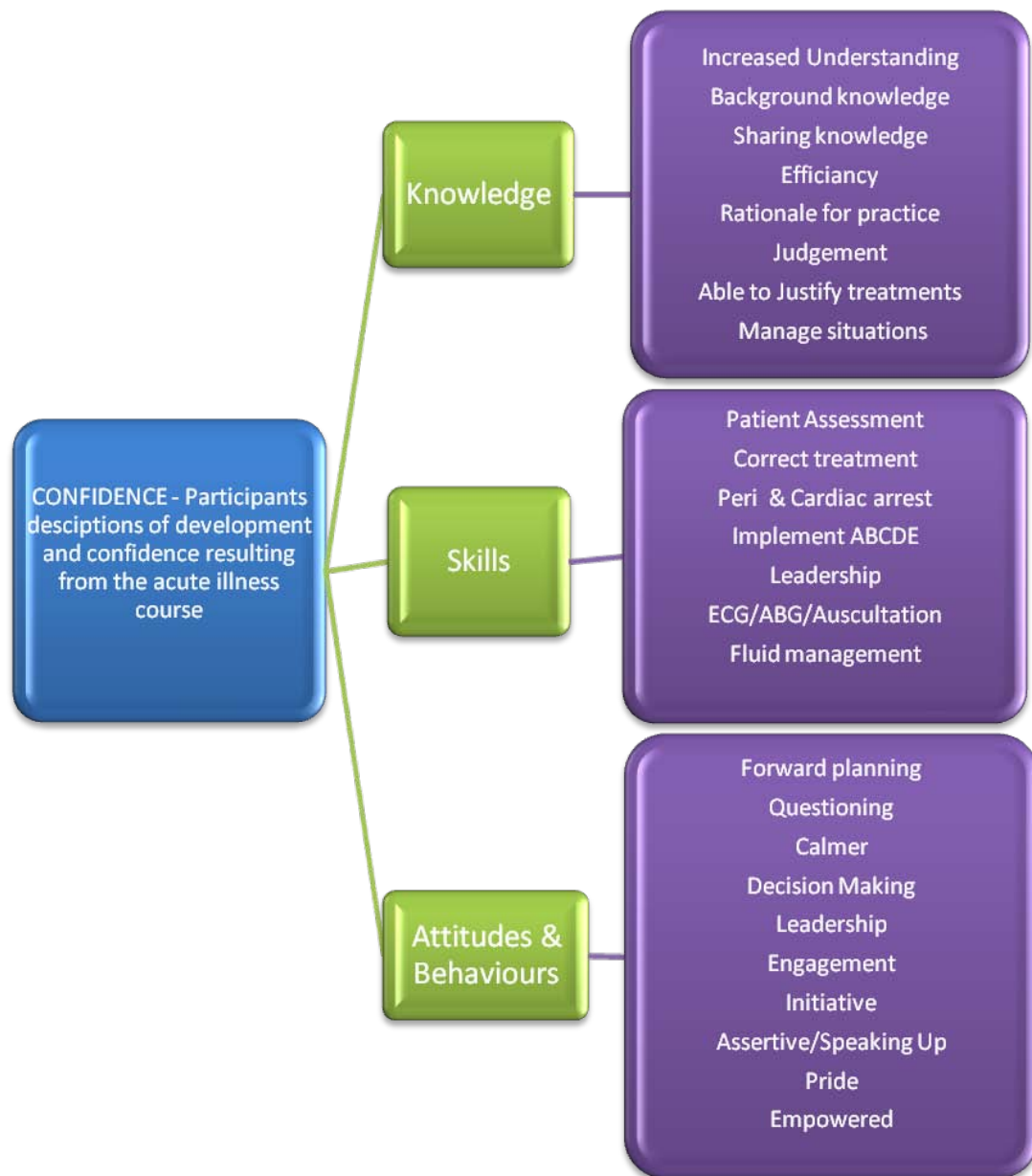
A significant factor that was not fully recognised by former students within the interview data was the requirement for them to recognise their personal limitations. The RN needs to recognise precisely what is within their capability and professional ambit and what is not and to be aware when to call for additional expertise.

Within the data, the word 'competence' did not appear overtly although, almost all participants were able to identify how their practice had developed through their participation in the course. Both former students and managers

though, made frequent reference to the ways in which 'confidence' had been boosted. The association between confidence and competence provides an interesting debate. The established and logical position is that professional confidence is a necessary pre-requisite to clinical competency (Bell et al, 1998). Yet it is also contended that the two have little association (Morgan and Cleave-Hogg, 2002). Further analysis of the data from this study suggests that it is reasonable to speculate that when the participants were describing 'confidence', something they did frequently, they were articulating attributes that were also evidence of 'competence'. This reinforces the position of Bell et al., in that participants used the term 'confidence' as proxy for 'competence'. Confidence was not therefore, related solely to skills but also to attitudes, professional demeanour and self assuredness in their role within the multidisciplinary team. All of these findings are synchronous with the definition of competence of the professional body as, "the combination of skills, knowledge, and attitudes, values and technical abilities that underpin safe and effective nursing practice and interventions" (NMC, 2010b, p.34). The confidence descriptors provided by the participants and their attributes of competence are demonstrated in figure 8.1. below. So although 'competence' was not directly identified within the data collection, there is sufficient evidence to suggest that for the participants 'competence' is a function of 'confidence' and for them, is largely synonymous with it.

Improvement in levels of clinical competence, should ideally, improve standards of care of the acutely ill patient in hospital, which leads to the next chapter, the participants shared experiences of acute care in hospital.

Figure 8.1 Confidence/Competence development



Chapter Nine

Findings: Standards of Care

9.1 Introduction

This chapter will present the findings in relation to the theme of standards of care that are provided for acutely ill patients within hospital. A plethora of literature has been cited regarding suboptimal standards of care in acute clinical environments (McQuillan et al., 1998; McGloin et al., 1999; Seward et al., 2003; Kause et al., 2004; NCEPOD, 2005; NPSA, 2007a). Suboptimal care is characterised by an acutely ill patient's clinical deterioration not being recognised, not appreciated or acted upon sufficiently quickly by healthcare staff (NPSA, 2007a). This chapter therefore, will describe the perspectives of participants on this international concern and it will examine some of the determinants of the quality and standards of care within the acute ward.

9.2 Incidents in acute care

A theme that emerged from many of the participants' interviews was the variety of the standards of care across the various wards and departments within their hospitals. These discussions often followed the exploration of experiences during the alternative clinical placements within the course. The participants discussed deficiencies in standards of care which often were more apparent on general wards in comparison to the perceived higher standards that were believed to be met on the assessment units and critical care units. Practitioners working on MAU saw the standard of their practice as somewhat superior to the skills and care that are provided on other general wards. This was articulated as follows:

"I went out with outreach ... that really opened my eyes as to how vulnerable patients can be out on the wards if they do suddenly deteriorate ... they are an awful long way from doctors sometimes ... we went to see one chap ... he had suddenly gone into renal failure ... I mean it was a busy elderly ward really and it was the doctors on the round that had called outreach in and when we got there they hadn't even done a set of observations ... his blood pressure was like 70 systolic, he was really very poorly ... he hadn't passed urine for the last 12 hours or something along those lines and there was none of the observations done. No fluid balance was done I don't think there was a

MEWS score within days and although he had been treated acutely, initially (on MAU) because he was then out on the elderly ward and expected to go home at some point ... they didn't see the relevance ... its fine if it all goes to plan you know they are going home and you concentrate more on the rehab ... and it was though when outreach came oh it's ok now you can look after him and sort of abdicate responsibility for them. It was scary really because you think well everywhere runs like ... here (MAU), where we work and I don't think, well none of us can say we're perfect and none of us can say if they are on hourly obs that they always get done on the hour or that you always pick up on people that are ill and we've got doctors based here all the time and we're well staffed and I think it's pretty scary really". Sharon

The perception was that the acutely ill patient would receive more effective care on the MAU environment rather than the general wards that was expressed in the following:

"We were able to appreciate our skills on MAU, we went to other areas and saw the things that they had and hadn't done to patients on other wards and it was quite frightening really to actually sit there and think if this patient was managed on MAU this whole situation would be managed so differently. I mean I have attended arrests on other wards where nurses are just sort of stood there and they have put a call out for a patient for the crash team to come ... nurses are just stood there saying the patient is there! Yes they are just like stood there pointing to where they are, they are not actually anywhere near the patients ... it's true! Not even pulled the bed out at the back, back rest off, initiated anything to do with maintaining the airway ... nothing!!" Sandy

(Other transcripts related to standards of care through the students' experiences of alternative clinical environment can be found in Appendix eleven).

The literature identified substandard care occurring outside critical care settings (McQuillan et al., Seward et al., 2003). Within many acute NHS trusts surgical or medical assessment units would not be regarded generally, as critical care settings. The early twenty-first century, however, has seen many developments taking place in assessment units. The participants' recognised that care on these units was not perfect. Fletcher (2007) suggested that nurses on MAUs should have an extensive skills repertoire to cope effectively with the demanding and frequently changing needs of patients who are

acutely ill. This nevertheless, is not a concern solely for those on the MAUs because acutely ill patients present elsewhere and are especially vulnerable when this happens among unsuspecting staff on general wards. The way in which students believed MAUs differ from general wards was summarised by the following:

“I think (on MAU) you just get to know little bits about lots of things rather than, you know, just focusing on just one area. I think it’s the volume of acutely unwell people we get as well, you’ve also have always to develop yourself haven’t you”. Sharon

Data emerged regarding standards of care from many of the former students’ interviews, and also from those with managers. Both groups were asked their opinion on the relevance of NICE guidelines (2007) and other evidence-base information that discusses suboptimal care. Their response included:

“Yes some of it (the guidelines) I do agree with, I think some of it is quite scathing but a lot of it is real and there is a need for it ... in an ideal world it would be nice to be able to give that little bit more wouldn’t it not just nursing care wise but observational wise to make sure we are doing what we ought to be doing”. Mabel

Respondent’s views were sought about influences that they believed to be the principal determinants of poor standards of care and several themes emerged as follows.

9.3 Establishment and available resources

A common deficiency identified was within staffing levels, time and the human resources to adequately care for the acutely ill individual. This was discussed so:

“It’s really difficult to pick up on it when you have got ten patients coming in every day and going to theatre and phones constantly going and you are dealing with four different clinics every day sometimes it is just a nightmare ... and I think that’s why critical illness falls down and you haven’t the time. Outreach will come and say do half hourly obs(ervations) and when you have 16 patients and you are running ten to theatre and back and you have got the phone constantly ringing and you have patients who are (poorly) and you are trying to sort that out, half hourly obs(ervations) is just not viable and I know they say the critically ill patients is the one you should be dealing with but if you have one person dealing with that one patient it all takes time and there is three of you on the ward the others are going to be critically ill by the

end of that day because you are not doing what you should for them so it is really hard, I do feel sorry for the staff". May

Staffing levels were related to the mounting challenge of having to care for the increasing number of acutely ill patients within the general wards (West, 2006). The historical changes were identified by one respondent:

"If only we had that extra nurse that shift it would make such a difference but it isn't going to happen is it? How long have I been doing it ... 25 years this year ... and the fact that we are nursing poorer patients out on the ward at one time if you had a patient with a (central) line in they would be on HDU or ICU but not now it is a regular occurrence that we have high dependency patients on the ward so there is lots of pressures". Mabel

Human resource and workforce deficiencies were often a very difficult and sometimes emotive subject within the Trusts. Respondents also identified that to provide optimum care, the wards and units need not only adequate numbers of staff but also adequate skill mix (Carroll, 2004; Fletcher, 2007). While ever there were shortages of well qualified staff the possibilities of releasing them for additional training became more remote and this was explained as follows:

"... ultimately you don't get the knowledge because you are short staffed. You don't get the care that the patients need because you are short staffed and it is a vicious circle, whereas if time was put into staff development and staffing levels even just one more qualified would make a vast difference to the care that they are receiving and they will be able to do the early warning scores and assess your patients better and stem some deterioration before it happens". Macy

In comparison to the general ward differences were observed in both the quality of staff and the staff and patient ratio that was to be found to be more favourable in high dependency and intensive care areas. One former student reflected on this:

"... you have got the staff, you have got the staffing levels and you have got the staff you need, yes you may have one day that you are two people short but for those two people they will not open two beds, they cannot physically open those beds, they (the patient) will go elsewhere". Sandy

Within challenging acute clinical environments the ability to prioritise care is a key skill requirement and this is less easy to achieve with adverse nurse: patient ratios that were described as following:

“Staff’s personal time, staff will stay, like now I have just rung someone who is on holiday and because we have a really poorly lady around the other side and we are really pushed on here so instead of leaving it really short and compromise anyone’s care or safety I will bring someone in and your budget gives doesn’t it and to be quite fair on here it is very very very rare that we run on levels that don’t provide good care, I am lucky we have got a good team”. Megan

Respondents identified the deficiencies in staffing levels and the effect of this on patient care and acknowledged that care had been recognised by their Trust management and how in one instance a workforce efficiency study was in progress that was described as thus:

“They are looking at how many nurses per shift ... and all the things like how long it takes to put a venflon in and stuff like that and then looking at the audit tools looking falls, pressure sores complaints and looking are they acutely unwell and could they do things differently”. Macy.

West (2006) argued a difficulty in claiming causal association between staffing levels and its effect on patient outcomes because of the multiplicity of determinant variables that exist within the relationship. Significant studies have identified clear and adverse consequences for patients in when both inferior staffing levels and skill mix are in evidence (Aiken et al., 2003; Rafferty et al., 2007; Tourangeau et al., 2007). The Royal College of Nursing (2006) has also provided arguments that are consonant with this former view. It identified clear evidence that linked RN input to patient outcomes, staff turnover and job dissatisfaction. Other detrimental factors have been alleged to influence acute patient care such as the NHS being in a state of constant policy and managerial change with examples cited that included the following:

“We have had a lot of upheaval, we have had reconfiguration and reduced bed spaces you know the impact of trying to nurse people out in community and we can’t always do that can we, it hasn’t worked as effectively as they thought you know we have closed areas and dispersed staff then it ends up being crisis management so we have had to re-open that area but the staff have gone so we have to take them from other areas who are already depleted adding more pressure

which impacts on staffing and we run on minimal numbers anyway".
Maggie

Darzi (DH, 2008) identified there was a 'change fatigue' within the NHS and staff were tired with the upheaval. He went on to identify how change that was led by clinicians and based on evidence of improved quality of care was more likely to produce positive outcomes than the sometimes haphazard NHS reorganisations of the past.

9.4 Knowledge and skills

At the point of qualification the RN is regarded as 'competent' to practise and modern pre-registration programmes have far greater emphasis on the acquisition of clinical skills and the individual fitness to practice than hitherto (NMC, 2010b). The characteristics of the students on the acute illness course however, indicated that the recently qualified nurse was in need of further development to care competently for the acutely ill patients. These students required CPD to equip them to build-on and develop the core, generic knowledge and skills required merely to register.

Wood et al. (2004) identified that staff dealing with very acutely ill patients had specific training needs. These concerned especially, a structured approach to assessment and management, knowledge of referral options and precisely when this is necessary. A comprehensive and focused preceptorship period and sustained support on one MAU was identified as one effective method of helping support and guide new staff through the transition into their new role and was described by the following:

"... they have wonderful preceptorship package, we have a lot of staff on the ward that have the mentorship course and as I say they have a wonderful mentorship package, they are totally supernumerary until it is mutually decided that they are ready to go and look after the patients unsupervised, saying that they are never unsupported they always have a senior nurse on the unit that they can come to for help, we work from side to side, although in my co-ordinator role I am co-ordinating the beds and I feel like I co-ordinate care as well. I would go more with the junior staff are they OK with the admissions ... any bloods etc and do in-house teaching as we go on". May

The lack of confidence and stress experienced by many newly qualified nurses may be compounded by the unreasonable expectation which some senior health service staff have through the wildly erroneous assumption that to be registered confers clinical infallibility (Charnley, 1999). The newly qualified practitioner is prepared to be 'fit to practice' in any current acute healthcare environment while the acquisition of more specialist and advanced skills requires forms of ongoing professional development.

Many educational initiatives to support the assessment of the acutely ill patient have been put in place, including: Advanced and Intermediate Life Support courses (Resuscitation Council (UK), 2005) and Acute Life Threatening Emergencies: Recognition and Treatment course (ALERT), (Smith, 2000). The shortcomings of some of these initiatives were identified by one participant:

“Well I am sure with the ALERT that everyone could recognise someone who was poorly and get the doctors there, I think that is OK but perhaps some of the nurses are not as highly skilled to do some of the interventions ... I am not sure that some would have the knowledge or the capability using these skills. I think they can recognise them, I think sometimes that the early management without a doctor and the early management like ABCDE is lacking”. Megan

9.5 Expert support

In 2000 the Comprehensive Critical Care document produced by the DH in England recognised the need for additional 'critical care' support for staff on general clinical wards. This led to the recommendation that acute NHS trusts have critical care outreach services; a team trained to support and share knowledge for staff working on general ward environments (DH, 2000). The nature of acute and critical care is such most patients requiring immediate access to appropriate services that operate on a 24 hour, seven-day a week. The critical outreach service in the local Trusts were established and were held to provide excellent support and guidance to staff on wards. The outreach service in both the local hospital Trusts, however, operated on a day shift only basis, leaving no outreach cover on the night shift.

Respondents confirmed that within general wards that when the acutely ill patient deteriorated and medical support was required it was not always readily available. This was described as follows:

“You are short staffed you are constantly phoning your doctors you know ... if you need a doctor you need one there and then you are not just bleeping them for the good of your health ... as a nurse you can only do so much ... So you have got to have them there, you can only manage a situation so far before you get to a point where you need other help”. Sophie

In contrast, another respondent reflected that on an ICU senior staff and medical support are readily available:

“You have got the consultant anaesthetist, you have got you know the registrar, they are all there on hand, you only have to pull a buzzer and they come running, you know in a couple of seconds, you have got everybody there that you need, whereas on a ward you are chasing everybody all the time”. Salle

Another participant identified the key to enable effective management of all instances would be to have more experienced healthcare practitioners or medical staff to be at hand at all times as follows:

“It makes you see why outreach are so important and they are able to ask someone like the anaesthetist and things and get their point across. I just think it is a brilliant link for nurses to have. Because it is not always possible to get a doctor ... and it is not always possible to get a doctor to listen to you when you can get hold of one ...and they don't always agree when you have a difference of opinion”. Sage

9.6 Maintenance of knowledge and skills

Knowledge and skills are a prerequisite to the management of acute episodes. The related challenge identified from the data was how to maintain competency once it has been acquired that was described as so:

“I worked on (a non-acute area) ... I think in two years we had one acute situation and you do get out of it, you do deskill and it is alright doing mandatory training once a year if you do your basic life support one year and you don't use it until a year later, or you don't use it at all that year then when it comes to the update, you have forgotten your skills”. Mary

It was identified that the NHS provided focused care on specialist wards and units, for example MAUs, respiratory wards and renal units. With this

changing face of healthcare and increasing specialisations, many nurses require a more in-depth knowledge of their speciality (Fletcher, 2007). These changes result in practitioners being exposed and becoming expert within their individual clinical speciality this, however, results in reduced exposure to other specialties. One student identified that on her ward (a specialist surgical ward) she found that most practitioners could look after the common occurrences but that when patients came in with “something different” to the familiar, many staff were out of their depth. She said:

“There are certain things that they can deal with from a (specialist) point of view they are very good at dealing with patients that come in bleeding and they bleed and bleed and bleed worse than gastric bleeds and they drop their blood pressure and their haemoglobin drops it can be 12 when they come in and it can be 6 within an hour, they know how to deal with those things but we have the other patients, the outliers from all the other areas and they don’t know how to deal with them properly and that is where the crutch of the problem is on these areas now as we have outliers practically all the time”. Sef

When acutely ill patients were cared for within a speciality ward, in addition to ‘outliers’⁵ there is often a difficulty when the acutely ill patients presents with co-morbidities, which with the acute patient care is often the case as a student said:

“One of the patients we went to see was a medical patient on a surgical ward and he was a surgical patient but he had medical issues and he was going between surgeons and medics ... his main problem was surgical so he was on a surgical ward, but the nurses were not knowledgeable of medical problems and on top of that they were quite reluctant. Their attitude was that they were not their problems so they were not interested in him”. Sally

It was believed that staff on general wards were becoming either deskilled or had never acquired the skills that were thought adequate to care for the acutely ill patient and that medical staff were directing the care for some acutely ill patients to where there was a more appropriate mix of skills such as the MAUs. This was described as follows:

⁵ Outliers- patients in hospital in a different speciality ward than which they are being managed. For example a patient admitted with a medical problem and under a medical doctor but whose bed is situated on a surgical ward.

“Yes I think a lot of the time the doctors say that the patients can’t move off MAU they have been there a week and still unwell and still triggering like a 10 on their early warning score, we are not allowed to move them off MAU until they are stable and you just think that is the problem on the ward they need to get used to looking after these patients”. Sharon

These practices result in a perpetual cycle, ward staff on general wards were not exposed to acutely ill patients very often and when they encountered them their lack of skills and competency, were thought to be leading to suboptimal care on general wards that was described as thus:

“We have had situations where I have seen these patients that have been moved off to the ward that have been acutely ill on the wards and have been transferred back from the ward again. Which defeats the object all together of the MAU ... but ultimately we shouldn’t be taking acutely ill patients back, that defeats the object of the MAU as an alternative to the ward. At the end of the day it is letting nurses get away with not developing themselves and not challenging themselves. They are not developing themselves further because they are not getting the chance to look after acutely unwell patients”. Sarah

9.7 Professional relationships

A recurrent theme that occurred within the data concerned professional relationships with colleagues working on other clinical wards and units within the same NHS organisation. There was often conflict and disagreement about individual working practices between colleagues in different parts of the hospital, each perceiving that their ward or unit was busier and under more pressure than other areas. This was reflected on by one student:

“Everyone seems to hate MAU nurses don’t they ... I think it is because MAU and A&E nurses ... They think that we go out onto the street deliberately to find people to bring to their ward. I think they think that we send them all the worst patients and we sit there with nobody in beds and when we have done the transfers we’re sat there doing nothing! They don’t realise we have a list that long of people waiting to come in and I don’t think they realise that we have so many acutely unwell people, so if we have someone that is unwell ... that are unwell in their eyes, this person was ten times worse when they came to us and they go to them and they get quite irate about it. They can be very critical of what we have done ... it is always the case that we presume everyone else is alright, we only worry about our own little box, the area we work in”. Steph

There were mutual misunderstandings about the workloads and pressures that prevailed in different parts of the hospital that were defined as follows:

“It’s always everyone else’s fault no-one appreciates what you do. I suppose we are a bit like that sometimes when we get patients like from A&E, we say they haven’t done that and that but you don’t really see what is going on at the time”. Sada

“They say things like you can’t send both admissions together can you give me an hour, we would sometimes if we could. I don’t think they understand the impact of breaching and things like that and whatever else is going on”. Samantha

Another former student from a general ward discussed an alternative view of the same point:

“We have lots of issues on the ward from MAU and A&E trying to admit patients and they have a job to do and the ward has a job to do, the ward that are short staffed feel like they are under pressure to get patients onto the ward and sometimes there is often a problem with communication and relationships”. Sage

It was recognised that if staff rotated and worked on different clinical areas as a matter of course that they would begin to appreciate and understand how different locations were managed. This would also provide the opportunity for staff from general wards to be exposed to acutely ill patients and practices to maintain their own clinical competency. This was recommended by one student:

“We’re saying that people need to rotate and come to us, a couple of people are swapping now. One of our nurses is going to the elderly wards and one of theirs has come to us and I think she’s a bit shocked about how busy it is and how much we actually do. I don’t think she had any idea about how we work on there so she can comprehend how complicated the job is. We have been saying for a while that we need to get everybody all the wards rotating for a week to give a clearer picture of what it is”. Sally

The alternative clinical placements during the acute illness course, goes some way to exposing staff to other clinical practices, as illustrated by this account:

“...it gave me a really good insight into what happens before patients get here (to MAU) and how they are actually referred to us and it’s a different way of working completely”. Sharon

9.8 RN characteristics

The data revealed a number of stereotypes to what sort of people worked where that was expressed by a respondent who said:

“I think you tend to find that people who are really interested in keeping the knowledge base up tend to go towards specialities and areas and acute areas ... you get a lot of more ambitious staff in critical and acute care areas ... people have, it's an awful thing to say really, but it's a lack of ambition really and I think that perhaps if there is ambition not everybody can be a ward manager or a sister or whatever but the fact that if you have got some drive and you want to carry on with your career you want to get some more qualifications you want to keep your finger on the pulse as it were”. Sharon

A view of the reasons that the acute and critical clinical areas facilities are believed to attract the ‘ambitious’ nurses was explored, the response was:

“I like being in the thick of things and you have an emergency situation and you have a positive outcome and you have been hands on its instant results and although it is not always what you want them to be I like that when you get someone in that is acutely ill and you make them better and they go home and you don't always get that in a non acute setting you know I like being busy and the challenge and the adrenaline rush and I like knowing that I am skilled enough to do it. I would find it boring on non-acute areas because I like a challenge I want to enjoy my job and get satisfaction out of it, we are all different aren't we”.

9.9 Policies influence on practice

An initial aim of the study was to investigate the practitioners' views on the policies that influenced the care that they provide within the acute clinical setting. The former students and their managers were asked which policies they thought influenced their practice, their responses included:

“I think things like the NICE guidelines on managing the acutely ill person in hospital have a lot of influence on us about how observations and things are done on acutely ill people”. Sally

A handicap identified was the limited time and ability for the practitioner to keep abreast of the current policies that are relevant to and influence acute practice. A student reflected on the position as she saw it:

“I am sorry to say it is one of those things you go to work and you get on with whatever you are presented with that day, you don't have time to think hang on a minute, is there are policy about this? unless it is something like you have a patient with an NG tube and you think right where is the feeding policy but they often have a regime in you don't

really have time to think about unless when you get home you sit down and think about it and then you go in on your day off and you look up policies then, which when you have a house with kids and garden to keep". Sarah

One student recognised the need for policies to influence her practice, she found it frustrating at times that her clinical colleagues did not always appreciate the influence of policy on practice:

"You realise how hard it is to get to the end result because people just don't listen and people don't like change I think that is part of the thing you know it's like you say the guidelines say you HAVE to do this. It's not just that, it's that I don't think they realise that it will make their job easier in the long run, if they actually do what they are saying they are there for a reason aren't they. They haven't written them for the good of their health. Yes but it is hard to implement change." Sana

It takes a confident person to question peers and clinical colleagues, may be highlighting or questioning that an aspect of their practice that is outside of the parameters of local policy:

"If you pick the right person they can say oh right I wasn't aware about that this is why we are doing this is why we do it that way ... some other people might think that you are sticking your nose in where it is not wanted and you shouldn't be questioning it, but we should question if the policy says you should do it this way and you're not you need a reason as to why you are delivering patient care other than what the policy say, because obviously our policies are based on NICE guidelines and WHO guidelines there has got to be a reason I mean NICE guidance is not done to say we'll just fling 'em some more paperwork to file away and not look at". Sara

Although the acute illness course had involved only a relatively small number of participants, the evidence identified the need for greater policy awareness in general but insights had nevertheless been derived about this as one student said:

"There were a few (policies) that I looked up on the ward because of my portfolio I put them in". Scott

"Well through the course I have looked at policies and I think it has made me more aware than looking for new ones that are out and like the resuscitation and going into shock patients and what energy and things like when (the tutor) spoke about anaphylaxis and ... it made me more aware of the policies and looking for them". Steph

9.10 Knowledge and Skills Framework

In 2004 the NHS implemented a major change in the form of a single pay spine and performance review for all NHS staff known as Agenda for Change (AfC). The NHS Knowledge and Skills Framework (KSF) was a career and pay progression device resulting from the AfC. The NHS pay system should be fully implemented at the time of the study (DH, 2004). As a requirement of AfC, all staff working for the NHS require an annual performance review of identified knowledge and skills through appraisal or personal development review (PDR). A participant's opinion on motivation effect of AfC and the KSF professed:

“... they are realising that they have to push themselves that bit further if they want to get that bit further and if they want to get up in the pay band scale ... that is what drives people now a days, well that's the real world isn't it. We want more money but we have to push ourselves to do it”. Sage

On achievement of core level competencies in accordance with their pay band, the successful practitioner would progress through the pay spine. A subject of exploration for the study was; if and how the acute illness course may have influenced the practitioner progression as part of the KSF.

Participant responses included:

“It has ticked a lot of the boxes like you have the professional development ... and you have got the proof that you are developing your skills you are moving out of your box really and it's a nice course to have tucked under anyone's belt” Megan

“Well with doing this (the acute illness course) that has a direct implication going through, in fact I am due points, I can't remember exactly which points it is by rights I should have an appraisal to go through a gateway this year and by the pure fact of what we are doing we will fulfil the criteria ... so yes in that respect”. Shannon

A common grievance for many of the students was that they had not received their annual appraisals or PDR within the last year:

“I might be able to answer that (the impact of the course on the KSF) if I had had an appraisal.” Sally

The process for the pay band progression within many organisations involved the automatic ascension of the practitioner through the pay bands. The

philosophy underlying this concerned equity that should be identified through appraisal so that the individual would be rewarded accordingly through progression up the pay scale. In practice however, the former students received their increments irrespective of their non-appraisal, something that somewhat negated the intended outcomes of the scheme.

The data overall indicated that the effect of the acute illness course on the KSF was limited not so much as a result of what the student had achieved but rather as result of managerial maladministration of the scheme of which participants said:

“No not yet as my PDR is due in august so ... I am not quite sure about that yet”. Shannon

“I had my KSF review June last year and it was noted down on there so obviously that goes to push me through another gateway I am not entirely sure how it works ... but I am sure when I go back and I have my next review obviously because I have completed it and passed it and I am going on to do further training it will push me through that way”. Shane

9.11 Discussion

The findings of this locally conducted study are resonant with the national and international picture of the occurrence of the suboptimal care of acutely ill patients in non-critical care settings (NCEPOD, 2005; NPSA, 2007a; NICE, 2007). The findings identified that substandard care was in evidence on the general wards in the two NHS Trusts that were the location for the clinically related aspect of the study. Prevalent evidence from the work indicates that the strong, common, subjective belief of practitioners is that the knowledge of staff and the standards of care were superior on acute assessments units to those on general wards. The study's participants' attributed suboptimal care to several contributory precipitants that included, staffing levels, increased patient dependency and the availability of expert support. The former finding concerning staff having more knowledge and providing higher standards is uncorroborated by the literature although, the latter finding concerning staffing levels and so on, has ample evidential support.

Staffing levels and also skill mix were continually reported to be one of the significant factors that accounted for deficiencies in the quality of acute patient care. Patients may deteriorate at any stage of their illness which may occur in any clinical environment and therefore, healthcare staff require the skills and knowledge to identify this. Subsequently, and if the management of the patient is beyond their capability and level of skill, then 'expert help' is required promptly. This necessitates that staff be self aware, decisive and are able to communicate effectively when they feel unable to cope. This was often not the case at particular times, for example during the night.

Identifying and dealing effectively with the deteriorating patient requires both perceptiveness and skill. The evidence suggests that NHS managers should ensure that staff development and CPD are sufficient to support the development of staff; however, releasing them for training was a frequently irreconcilable challenge that is enduring. Those identified with particular training needs were the more recently qualified RNs. The data supports the view the new RNs should commence their professional role with a supportive, developmental, preceptorship programme. This would enable the graduated acquisition of essential observational skills to effectively recognise and manage the acutely ill or deteriorating patient. In this regard, the more experienced staff were testimony to the maxim that, the greater their exposure to acutely ill patients, the better their acuity had become in recognising the danger signs. On general wards where the same level of acutely presenting conditions is infrequent then unsurprisingly, the staff were less able to maintain their competence in dealing with the challenges.

There are a multitude of policies and guidelines internationally, nationally and locally concerning the provision of acute clinical practice. Yet the rigours of the RNs' pressurised workload make it difficult to keep totally abreast of the latest and best evidence (NICE 2007; DH, 2008; NICE 2009). A recognised organisational strategy is to identify a 'clinical lead' to implement and disseminate this evidence and to reinforce the personal responsibility that practitioners have concerning evidence based practice (NMC, 2008a).

In the past the NHS has been described, notably by politicians, as a 'family' and some discussions within the interviews identified that staff on neighbouring wards and units enjoyed varying degrees of camaraderie. Staff were under a great deal of pressure for many reasons that have been identified in the data and there were occasions when stressed individuals vented their feelings on others in ways that were somewhat less than fraternal. This occurred within a ward/unit and also between wards/units and the alternative placement went some way to providing insight into what things were like elsewhere and that other people get stressed as well.

Many of the responses relating to the contributions of the acute illness course towards the KSF suggested the KSF to be largely ineffectual, simply because as many of the former students had not had an appraisal. Others perceived some influence of the course in relation to it, yet were unable to be specific about exactly what that was. This seemed something counter to the aspiration of the two Trusts whose commitment was to safeguard standards of care and to use training as a means of achieving this.

Chapter nine has presented the finale of the findings of the educational case study on the acute illness course; chapter ten will therefore present the overall conclusions of this study.

Chapter Ten

Conclusion

10.1 Introduction

This, the final chapter will present the conclusions of this evaluative case study of the acute illness course. The chapter will highlight the original results that emerge from its findings. The implications of the work for practice, education and research will be considered and this will be followed by a short personal reflection on the conduct of the study.

10.2 Standards of acute care

The government has throughout the early twenty-first century, produced several highly publicised policy documents that address the development of the practice of acute care with the express intention of enhancing its standards and quality (DH, 2000; DH, 2004a; NICE, 2007; DH, 2008; NICE, 2009). In consequence, RNs and other healthcare professionals are challenged daily to ensure they keep abreast of these proposals to deliver effective and competent care to acutely ill patients. Standards of care have remained a prominent concern for the local NHS trusts involved in this study, that identified that suboptimal care and practices on general wards, seminally identified by McQuillan et al., are still in existence over a decade after this work was published (McQuillan et al., 1998).

Universities strive to work with their NHS partner organisations to effect the implementation of policy and they do this through the design of courses that produce students who can meet patient need appropriately as it arises. The evidence is that the understanding success of any particular course, is dependent on the rigorous evaluation of its outcomes and this case study has sought to provide this in relation to the acute illness course.

10.3 Skills, confidence and competence

The aim of this research was to investigate the influence of CPD study on healthcare practitioners' competence in acute clinical practice and to do this, the acute illness course was scrutinised. Achieving competence necessitates the development of knowledge, skills and attitudes and the sequential enabling progression of the relative novice to the acquisition of advanced or expert practice abilities (Benner, 1984).

The former students and their managers were invited at interview to reflect on the course and to provide their perceptions of its teaching, learning and assessment methods that were critically analysed to assess their influence on the competence of RNs in acute care settings thereby, gaining a detailed estimation of the effectiveness of what the course had set out to achieve.

On initial analysis of the data, the participants recognised key technical skills that they believed improved their ability to provide acute care through interventions such as airway management or ECG interpretation. The achievement of these individual tasks *per se*, does not make the RN competent in the overall care of the acutely ill patient. Yet from the narratives provided by the study participants, the course was seen as beneficial in providing a generic repertoire of relevant skills. For although both students and managers did not overtly use the term 'competence', the data confirms that they believed it to be a function of, and synonymous with 'confidence', something regarded as hallmark of the success of the course.

The evidence from the study points to the success of the course in nurturing the necessary range of academic abilities, clinical skills and the marked growth in the students' in personal assurance in doing their job that was recognised both by them and by their managers. The development of confidence and the achievement of competence was also defined by both groups of participants in ways that is entirely resonant with that of the statutory body as, "the combination of skills, knowledge, and attitudes, values

and technical abilities that underpin safe and effective nursing practice and interventions” (NMC, 2010b, p.34).

The students of the course were exposed to a variety of generic, specific and individualised learning opportunities and it seems from the evidence accrued from the study, that this is an overall contributor in producing a more competent practitioner who is better able to improve the care of acutely ill patients than they were before they had taken the course.

10.4 Competence in practice

This study acknowledged the slippery nature of the concept of competence and that it is something that often exists in the eye of the beholder whereas, recognising where it does not exist in the form of incompetence, is often a simpler thing to define. The study analysed how influential academics and professional bodies have attempted to provide context-specific, definitions and concluded that it is the existence of so many of these, which has compounded the conundrum of what competence really is.

The work contrasted these differing views and taxonomies and noted the distinction between the various explanations that were both behavioural and holistic in nature. The behavioural account is procedural and mechanistic and has a strong psychomotor emphasis (Eraut, 1994). Behavioural definitions have however, been regarded as reductionist and although they do offer more precision concerning the technical elements of competence that is more measurable than the humanistic interpretations (McAllister, 1998). These contrast with the holistic view that comprises the overall application of the more comprehensive cognitive and affective dimensions of caring (Cowan et al., 2005). Gonczi (1993) claimed the holistic view of competence would make assessments broader but that is something that enhances their validity.

In providing this new explanatory evidence and in assessing the effectiveness of the course in generating competence in students, an operational definition was formulated that emanated from the extensive literature concerning

suboptimal care that was the *raison d'être* for the study. This identified the generally agreed, cognitive and affective attributes as well as the specific psychomotor or technical skills that are pre-requisites for the avoidance of suboptimal care while acknowledging the truism that, "competency should not be measured by endless tasks but conversely competence should not be so broad that it is unachievable and meaningless" (Cowan et al, 2005, p.362).

The study also addressed the possibilities of successfully teaching students to be competent because it has been said that, "It is one thing to define competencies and to have views about their assessment but it is quite another to have a pedagogy for competence" (Edwards and Knight, 1995, p.15). The significant findings to emerge from this study in this regard compare favourably with the assumptions of Watson who deliberated on the dilemmas concerning the identification of competence in nursing (Watson, 2002). He observed that the processes involved in the initiation of competence require highly educated and experienced individuals to disseminate the necessary knowledge as well as the ability to impart the related skills, something borne out convincingly within this course, according to the findings of this work.

The study has thus succeeded in adding additional explanation and specificity to what competence and competency in acute practice actually are while recognising these elusive entities are unlikely to ever have a universally acceptable definition.

10.5 The market need

This course was tailored to market need and to student and employer requirements and the participants in this study were all nurses. A consequence of its findings has meant that from 2010 it will be delivered at master's degree level affording the flexibility required concerning its academic level and meeting the need to widen its entry gate to practitioners other than nurses. A common syllabus will be delivered but assessment tools requiring differentiated learning outcomes will be calibrated at different academic levels. This will enable the students to opt for the particular academic level of award

that meets their need and the levels will be differentiated by the demands of the assessment strategy.

Many academic courses are traditionally delivered according to the University academic year. This system allows little flexibility in the delivery and completion of a course for CPD students who are also busy professionals. The healthcare sector is a large stakeholder in the University CPD provision, yet the majority of the academic health courses are delivered at a time of year when acute clinical areas are under the greatest strain due to winter pressures. The data from the study suggested that sometimes, students were not undertaking their periods in clinical practice under optimum learning conditions. With this in mind and from 2009, a new pattern of delivery saw the students avoid the more critical winter months by accessing the course when hospital activity is less intense.

Interviews with former students of the course suggested they had previously studied at the University and although no statistics were collected about this, a positive previous learning experience had often influenced their motivation to continue their studies there. Students found frequently that there were several personal and professional obstacles to overcome prior joining the course, including the negotiation of protected study leave and financial support that had great disparities between employers. Quite surprisingly, given the cost of training, the NHS Trusts included in this study had no clear and equitable strategy concerning access to CPD study.

This study has illustrated that improving clinical performance across all NHS wards and departments is a common strategic NHS Trust objective and this demands that CPD courses are able to match this aspiration. The results of the study emphasise that educators have a role to enthuse and inspire students in the development of practitioners who are under tremendous daily pressure to meet NHS targets and the needs of their demanding workload. This study identified that many CPD students were highly dedicated and often motivated individuals who are committed to personal development despite

finding the work/study/life balance is for some a tremendous challenge that is nevertheless, one that is surmountable.

10.6 Skills and competencies for acute clinical practice

Ensuring that a course is contemporary in nature and meets the clinical and academic needs of its students is essential for its successful delivery.

Planning the content of the acute illness course syllabus and ascertaining the content that is required covering was based on the clinical judgment of the lecturers in consultation with the practitioners involved in the course design.

This was further supported by relevant literature explored and more recently policy pronouncements (Smith and Poplett, 2002; Resuscitation Council, 2005; NICE, 2007). The syllabus content and teaching methods were identified as being specific enough to ensure that the student achieved the core requirements to competently care for the acutely ill patient while other strategies allowed the student to adapt their learning to meet their individual learning needs.

In 2009, NICE published the competencies for recognising and responding to the acutely ill patient in hospital in England (NICE, 2009). The NICE competencies were mapped against the course content which resulted in the acute illness course addressing comprehensively, the competencies required for the 'primary responder' level. The primary responder is defined as the more experienced registered practitioner who cares for the acutely ill patient. The acute illness course evolved through partnership working and was subsequently commended within the NHS Trusts' Strategic Plans as one method to meet the NICE primary responder competencies and the national standards set for England.

10.7 Learning approaches

The learning strategies used were a key concern of this research and both the innovative and the eclectic nature of these characterised the delivery of this course. These learning tools addressed what the evidence derived from the literature showed to be relevant subject material that developed analytical

abilities, student autonomy and that provided a well balanced student experience in both academic and clinical domains. Students were content with the depth, breadth and pertinence of the material to which they were exposed and they believed that this was well presented. They acknowledged that though the programme was sometimes very demanding that nevertheless, learning was a generally enjoyable experience.

All students entered their learning experience with different levels of aptitude that required recognition in the context of the students' further academic and professional development. The variety of teaching and learning strategies used thus addressed flexibly, individual student needs in both academic subjects and in the clinical dimension of the course.

Simulation was a much used teaching strategy to support the application of theoretical principles within a safe, simulated practice environment. The evidence from the study confirms that this approach allows students to be active rather than passive recipients during their learning experience. Simulated learning was evaluated positively by the majority of students who provided clear examples of knowledge transfer from the skills laboratory to their clinical practice and this was a factor in enhancing their confidence despite some elements of the 'active learning' process being perceived by many as stressful. The data from the study confirmed that teaching, learning and assessment using simulation is capable of producing adverse psychological sequelae that could both impede or inspire learning. The implications of this are something that were not considered in the initial course planning but the evidence derived from the study suggest that additional concerning it, diligence is now required.

It can be argued that a competency-based curriculum should employ assessments that capture reality to be truly effective measures of it and that simulation can only do this partially. The clinical mentor is the undeniable expert concerning the student's clinical judgements and their ability to perform competently in practice. In reality, the equity and standardisation of clinical

practice assessments is a major impediment confronting all clinically related courses of this kind. Identifying and training appropriate mentors and clinical assessors is a constant concern that the evidence suggests was achieved adequately within this case study. The findings about the success of simulation in this study mirrors the literature in that simulated assessments are more open to verification than the more precarious matter of trying to assess the student 'live' in clinical practice.

Providing students with the 'choice' of assessment methods to advance their academic and clinical skills received acclaim in the findings of this work. Choice afforded students the opportunity to undertake assessment methods linked to their preferred learning style and provided the added potential of producing a beneficial learning resource that the RN could take back to their clinical teams. The avoidance of perceived 'high stress' assessment methods, such as presentations, emerged as a significant factor that influenced the students' choice of assessment method. Similar to simulation, extreme anxiety may potentially disable learning, yet some degree of anxiety can be a motivator and this too is borne out by the findings from this work that is once more synchronous with the literature (Boud and Falchikov, 2007). There was some dissonance in the minds of students about the value of those assignments that might bring benefits such as transferable skills or prepare them for lifelong learning and what they felt that they needed. It was also not always possible or indeed desirable for students to be made to feel comfortable through the diet of assessment and one student demonstrated that she would opt out of the course completely rather than do an assessment method that did not suit her. The matter of 'choice' raised some questions about its pros and cons. Offering students' choice of assessment is nevertheless, confirmed by the data to be well received and this stratagem has been subsequently adopted as a feature of other health and social care professional programmes offered at varying academic levels across the University.

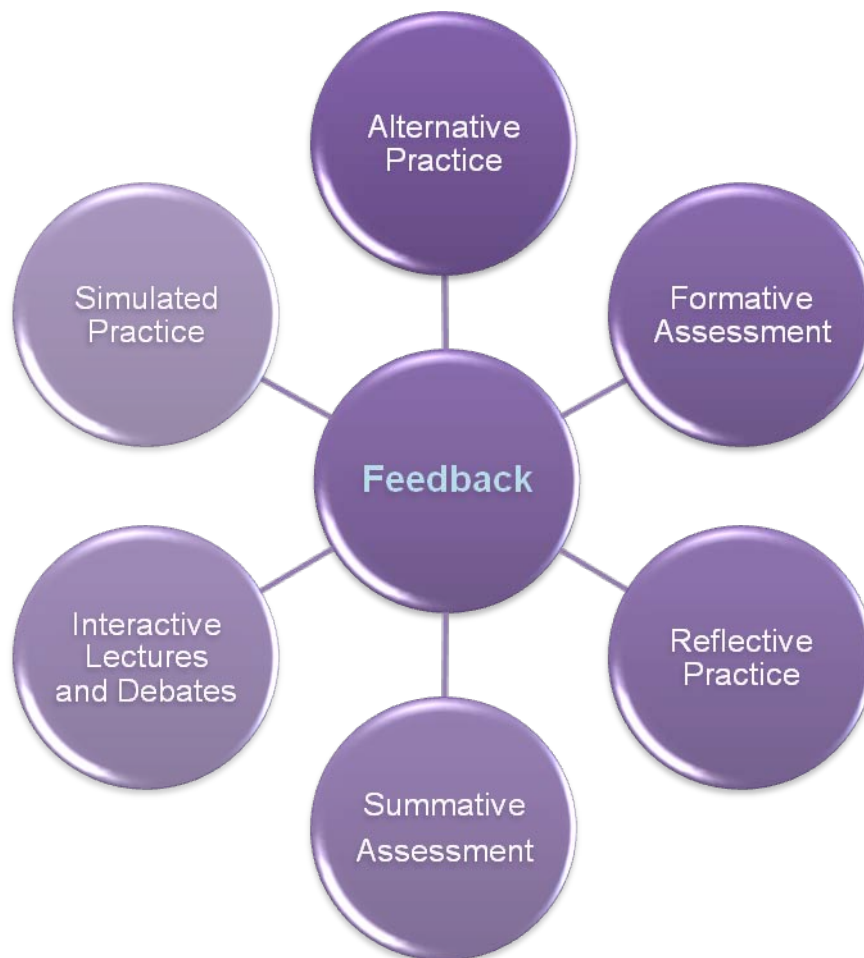
The placement days and portfolio of assessment provided the opportunity for the student to identify specific or specialist topics within acute practice that they wished to improve. The alternative practice placement element afforded the chance for the RN to gain unique and individualised learning experiences from the existing rich resources available daily in the NHS. On the basis of the findings of this study, the Masters' acute illness route provision now includes a fifteen credit generic practice module. Following focused thematic learning within the practice setting, the student will undertake five alternative placement days where individual learning outcomes have been negotiated through an agreed action plan. Now as result of the study, all of this will be assessed through evidence of learning in practice that the student will present at an oral examination or *Viva Voce*.

It is the responsibility of each RN to keep abreast of policies and guidance that influence the management of the patient in their care. This study identified that many healthcare practitioners, for a variety of reasons, found it difficult to achieve their clinical updating needs within their daily practice. Building the identification and analysis of policies and clinical guidance as an academic outcome of the course did go some way to supporting and directing the practitioners towards informed sources of evidence and towards a broader appreciation of their need for life-long learning.

10.8 Performance and capability feedback

Constructive feedback was a salient feature accompanying the learning and teaching methods used within the course and this was acknowledged by the students as something that was supportive, an indicator of their progression and something that enhanced their confidence. Feedback was integral to the formative and summative assessments employed on the course, which is demonstrated in figure 10.1. below.

Figure 10.1 Model of learning strategies supporting performance feedback during the acute illness course



The acute illness course employed informal, direct and indirect feedback mechanisms through peer and tutor feedback within the discussions and debates in the interactive lectures and during the simulation sessions. This nurtured reflection and gave the students the opportunity to acquire feedback on either their practice development or on the academic learning that had taken place. Reflection is a form of self assessment and feedback which supports the student to make decisions and judgments about their development needs which is a process that encourages the progression to autonomous practitioners. Formative feedback offered the student the

opportunity to develop academically and clinically through a non-threatening, low risk approach. Essentially students were encouraged to practise without the fear of failure, before the administration of the summative assessment or the exposure to assessment in acute practice.

Feedback may mean different things to different students and some may not recognise when they are receiving feedback. For example, a minority albeit, would not identify reflective processes or peer group discussions as forms of feedback. Yet discussions and debates involved peer learning and in turn, these provide new sources of information and the sharing of good practice. The feedback given following summative assignment was much more prescriptive and an obvious way to comment on a students' performance. Overall, the evidence from the study confirms that feedback enables positive identification of students' academic and clinical performance or capability and that subsequently may lead to improved self-esteem and confidence within clinical practice, things that also harmonise and confirm the existing literature (Billings and Halstead, 2005).

For students to perceive learning as effective, explicit outcomes were required that demonstrated the transparency of what the course could do and that was transferrable to their clinical practice. In addition, managers were more prepared to support and release staff from busy clinical areas when they could clearly see a positive relationship and development in the students' practice, that might influence patient care for the better. The evidence supports the view that the more the course outcomes aimed to develop the students' skills and competence within their clinical practice, the more receptive was the student.

10.9 Maintenance of competence

Several attributes have been linked to increase confidence contributing to the overall development competence. Competence however, is a context and time specific idea that requires the RN to be continually exposed to the particular area of competence, enabling them to maintain their claim to it.

Eraut (1994) suggested that serious consideration should be given to 'date-stamping' qualifications linked to a system of 5-10 year updates. Continued 'exposure' and 'performance feedback' provide for the continuous maintenance and development of confidence and competency within the relevant clinical context. This model has been presented in figure 10.2. Competence should not be seen purely as the aptitude for the healthcare practitioner to perform effectively once, but "the capability to repeat that performance to the same standard time and time again on a regular basis" (Mason-Whitehead et al., 2008, p.76). It is suggested therefore, that access to the continuum demonstrated within this model, should lead to the maintenance of competence and the potential for the practitioner to achieve the higher level abilities, such as proficiency or expertness that are a feature of the work of Benner (1984).

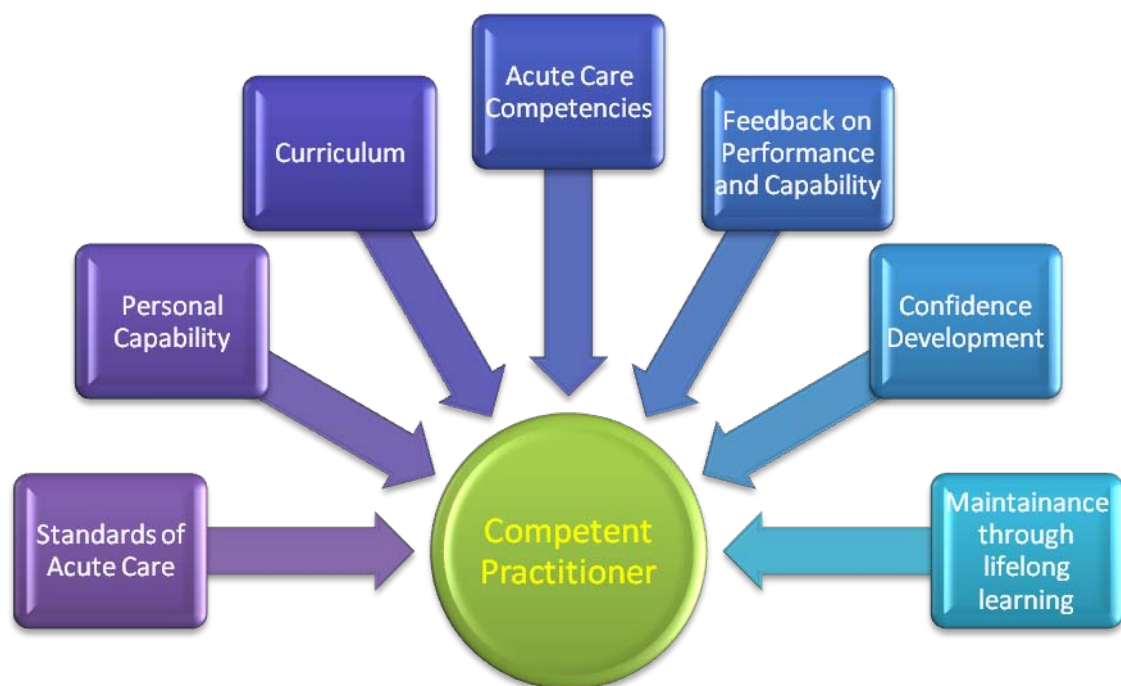
Figure 10.2 Model of acquirement and maintenance of competence



10.10 Concluding summary

This chapter has sought to synthesise the elements that comprise the development of clinical competency that has been the focus of this case study. The chapter has sought to draw together the interrelated, salient processes at work within the acute illness course to construct an explanatory framework of just how competence was developed in its students. It is this framework that denotes the novel and innovative contribution of the work to the field of health services education. The explanatory framework in figure 10.3 depicts this and the elements of it are discussed below:

Figure 10.3: An explanatory framework for the development of the competent practitioner in acute health care.



It can be seen that the starting point for the student undergoing this learning experience is to gain a grasp of the standards that determine the quality of the care they are required to provide to acutely ill patients. These emanate from both policy and from the scholarly literature and were integral to the design of

the acute illness course. Cohorts of students were recruited to the course and succeeded, despite having to surmount what for some, were both personal and professional obstacles.

The curriculum is an axiomatic consideration and this employed eclectic tactics to execute learning, teaching and assessment. The latter contained elements of choice that accommodated individual learning styles, all of which are an important consideration in the development of competence. The student also needed preparation in specific skills and competencies that notably concerned the recognition of patient deterioration and an accompanying repertoire of cognitive, affective and psychomotor skills to deal with this.

Personal feedback on the students' intellectual and clinical performance and capability within the course were a prominent consideration and were instrumental in encouraging practitioners who become reflective, self aware and develop a healthy self-criticality. This subsequently developed the students' personal confidence which was a significant feature within the strategy to create the competent practitioner to the point where the two were recognised to be mutually dependent.

Finally, the maintenance of this momentum and the cultivation of autonomous learners who are confident and competent was recognised not to be a once and for all endeavour. It is recognised that it requires continuous maintenance through frequent exposure to acutely ill patients, an exposure to new literature and through and continuous performance appraisal.

10.11 The recommendations following the findings of this study

10.11.1 Practice & Policy

The findings and conclusions of this study by no means offer a total solution to the challenges arising in acute care but they provide evidence that something useful can be done to address suboptimal care through this CPD experience that policy has indicated has a valuable contribution to make (DH, 2003; NICE, 2007), and that this is the case is confirmed by this evidence. Nevertheless, the acute illness course is not a total panacea and nor will it be

so until a critical mass of staff have undergone this kind of preparation. Until this has happened, there will still remain a workforce with differing levels of capability among those who have neither the time nor the motivation to undergo the exercise that this work has analysed.

To effectively assess CPD demands of the acute clinical environment , it is recommended ideally, that NHS partners invest in a Training Needs Analysis (TNA) to judge the level of skill and aptitude and to select individuals who are the strongest candidates to be developed and then to properly support them through a course of this kind.

10.11.2 Education

Education and training are among the first casualties of NHS austerity but the evidence from this study suggests it provides a good return for investment in it. Its principal messages, evidence and recommendations reside in the explanatory framework that it has constructed and that can be described with succinctness as being about an innovative curriculum design that generates competent practitioners.

10.11.3 Research

The emergence and dissemination of this work produces the clear recommendation that it is a start. Yet it provides a benchmark that recommends that further work into the dynamics between competence and the outcomes of care is something that about which much more needs to be learnt.

10.12 Post script

This educational evaluation used the case study as an appropriate research method to examine in detail, the many factors that influenced the CPD of healthcare practitioners undertaking the acute illness course. The case study investigated the many variables of the phenomena of acute care and its relationship with the course. It has afforded a comprehensive exploratory method that would not have been gained from a simple educational

evaluation. The case study analysed multiple perspectives and information-rich data was collected from the participants involved that are seen as a particular strength of this study. In acknowledging the researcher's prior beliefs and attitudes rather than denying them, the case study recognised in a transparent way, how these might have influenced the research data and outcomes (Yin, 2003; Bryar, 2000; Simons, 2009).

On reflection, the multidimensional nature of this the case study has by necessity, inevitable limitations, not least those imposed by restriction of time and this meant that some dimensions of the course and its students were under investigated and this requires acknowledgement.

The evaluative qualities of this work establish convincingly that the acute illness course is a generally good thing and can in collective terms, be calculated to improve the competence of its participants but this is not to imply that it has any measurable effect on standards of patient care overall. In similar vein, while it has provided an exemplar of a kind of course evaluation, there is no claim that it has achieved anything other than the 'fuzzy generalisations' that were its original intentions (Bassey, 2009, p. 62).

References:

- Adhern, J. & Philpot, P. (2002) 'Assessing acutely ill patients on general wards' *Nursing Standard*, 16, (47) pp.47-54
- Aiken, L.H., Clarke, S., Cheung, R.B. Sloane, D.M. & Sibley, J.H. (2002) 'Hospital Nurse Staffing and Patient Mortality' *JAMA*, 288, (10) pp.2948-2954
- Aiken, L.H., Clarke, S., Cheung, R.B. Sloane, D.M. & Sibley, J.H. (2003) 'Educational levels of Hospital Nurses and Surgical Patient Mortality' *JAMA*, 290, (12) pp.1617-1623
- Alasuurtari, P. (1995) *Researching Culture: Qualitative Method and Cultural Studies*. London: Sage
- Alinier, G., Hunt, B., Gordon, R. & Harwood, C. (2006) 'Effectiveness of intermediate-fidelity simulation training technology in undergraduate nursing education' *Journal of Advanced Nursing*, 54, (3) pp.359-369
- Alinier, G., Hunt, B., & Gordon, R. (2004) 'Determining the value of simulation in nurse education study design and initial results' *Nurse Education in Practice*, 4, pp.200-207
- Allen, K. (2004) 'Recognising and managing adult patients who are critically sick' *Nursing Times*, 100, (34) pp.34-37
- Barkway, P. (2001) 'Michael Crotty and nursing phenomenology: criticism or critique' *Nursing Inquiry*, 8, pp.191-195
- Barnett, R. (1994) *The limits of competence, knowledge, higher education and society*. Open University press: Buckingham
- Basford, L. & Slevin, O. (2003) *Theory and Practice of Nursing: An integrated approach to caring practice*, 2nd Ed. Cheltenham: Nelson Thornes
- Bassett, C. & Makin, L. (2000) *Caring for the Seriously Ill Patient*. London: Arnold
- Bassey, M. (2009) *Case Study Research in Education Settings*, 4th Ed. London: McGraw-Hill
- Bastable, S. (2003) *Nurse as Educator: Principles of Teaching and Learning in Nurse Practice*, 2nd Ed. London: Jones and Barlett
- Begley C. (1996) 'Using Triangulation in Nursing Research' *Journal of Advanced Nursing*, 24, pp.122-128

- Bell, A., Horsfall, J., & Goodin, W. (1998) 'The mental health nursing clinical confidence scale' *Australian and New Zealand Journal of mental health*, 7, pp.184-190
- Benner, P. (1984) *From Novice to Expert: Excellence and Power in Nursing Practice*. London: Mosby
- Billings, D.M. & Halstead J.A. (2005) *Teaching in Nursing: A Guide for Faculty*, 2nd Ed. St. Louis: Elsevier
- Black N. (1994) 'Why we need qualitative research' *Journal of Epidemiology Community Health*, 48, pp.425-6
- Bland A. & Sutton A. (2006) 'Using simulation to prepare students for their qualified role' *Nursing Times*, 102, (30) pp.30-32
- Blegen, M.A., Goode, C.J. & Reed L. (1998) 'Nurse staffing and patient outcomes' *Nursing Research*, 47, (1) pp.43-50
- Bligh, D.A. (1998) *What's the use of lectures?* 5th Ed. Exeter: Intellect.
- Borg, W.R. (1981) *Applying Educational Research: A Practical Guide for Teachers*. Longman: New York
- Boud, D. (1987) *A facilitators view of Adult Learning: Appreciating Adults from the Learners Perspective*. London: Kogan Page
- Boud, D. & Falchikov, N. (2006) 'Aligning assessment with long term learning' *Assessment and Evaluation in Higher Education*, 31, (4) pp.399-413
- Boud, D. & Falchikov, N. (2007) *Rethinking Assessment in Higher Education*. Oxon: Routledge
- Boydell, T.I. & Burnard, P. (1993) 'Using experimental learning methods with larger groups of students' *Nurse Education Today*, 13, pp.60-65
- Bradshaw, A. (2000) 'Editorial comments' *Journal of Clinical Nursing*, 9, (3) pp.319-320
- Bradshaw, A. & Merriman, C. (2008) 'Nursing competence 10 years on: fit for practice and purpose yet?' *Journal of Clinical Nursing*, 17, pp.1263-1269
- Bradshaw, G. (2003) *Involving service users in the assessment of the performance of pre-registration student midwives – an interpretive study of the perceptions of key stakeholders*. Unpublished EdD thesis: University of Huddersfield.
- Bradshaw, P. (1989) *Teaching and Assessing in Clinical Nursing Practice*. London: Prentice Hall

Bryar, R.M. (2000) 'An examination of the case study' *Nurse Researcher*, 7 (2) pp.61-79

Brosnan, M., Evans, W., Brosnan, E. & Brown, G. (2006) 'Implementing objective structured clinical skills evaluation (OSCE) in nurse registration programmes in a centre in Ireland: a utilisation focused evaluation' *Nurse Education Today*, 26, pp.115-122

Brown, S. & Knight, P. (1994) *Assessing learners in higher education*. London: Kogan and Page

Brown, S., Rust, C. & Gibbs, G. (1995) *Strategies for diversifying assessment in higher education*. Centre for staff development: Oxford

Brown, D., Mercer, M., Buchan, J., Chubb, C., Cox A. & Robinson. D. (2010) *NHS Staff Council, Review of the NHS Knowledge and Skills Framework: Final Report*. Institute in Employment Studies: London

Burkšaitienė N. & Teresevičienė M. (2007) 'Integrating alternative learning and assessment in a course of English for law students' *Assessment and Evaluation in Higher Education*, 33, (2) pp.155-166

Burnard, P. & Chapman, C. (1990) *Nurse Education – the way forward*. London: Scutari Press

Burns, N. & Grove, S.L. (2005) *The Practice of Nurse Research: Conduct, critique and utilization*, 5th Ed. St Louis: Elsevier

Calderdale and Huddersfield NHS Foundation Trust (2009) [online] Available www.cht.nhs.uk, [Accessed 14th January 2009]

Calman, L. (2006) 'Patients' view of nurses' competence' *Nurse Education in Practice*, 6, (6) pp.411-417

Carroll, L. (2004) 'Clinical skills for nurses in medical assessment units' *Nursing Standard*, 18, (42) pp.33-40

CASP: Critical Appraisal Skills Proforma (2002) *10 questions to help you make sense of qualitative research*: National Collaboration of Qualitative Methodologies

Charnley, E. (1999) 'Occupational stress in the newly qualified staff nurse' *Nursing Standard*, 13, (29) pp.32-37

Cioffi, J. (2001) 'Clinical simulations: development and validity' *Nurse Education Today*, 21, pp.477-486

- Clarke, S.P. (2004) 'Failure to rescue: lessons from missed opportunities in care' *Nursing Inquiry*, 11, (2) pp.67-71
- Cochran- Smith M. & Lytle, S.L. (1993) *Inside/outside: Teacher research and Knowledge*. Teachers College Press: New York
- Coffield, F., Moseley, D., Hall, E., Ecclestone, K. (2004). *Learning styles and pedagogy in post-16 learning*. A systematic and critical review. London: Learning and Skills Research Centre.
- Cormack, D. (2000) *The Research Process in Nursing*, 4th Ed. London: Blackwell Science
- Cowan, D.T., Norman, I., & Coopmah, V.P. (2005) 'Competence in nursing practice: A controversial concept – a focused review of the literature' *Nurse Education Today*, 25, (5) pp.355-362
- Cowan, J. (2006) *On becoming a Innovative University Teacher: Reflection in Practice*, 2nd Ed. London: Mosby
- Crooks, T.J. (1988) 'The impact of classroom evaluation practices on students' *Review of Educational Research*, 58, (4) pp.438-443
- Crooks, B., Brown, B., O'Mara, L. & Noesgarrrd, C. (2005) 'Development of Professional Confidence by post diploma baccalaureate nursing students' *Nurse Education in Practice*, 5, pp.360-367
- Crotty, M. (1998) *The foundations of Social Research: Meaning and Perspective in the Research Process*. London: Sage
- Curzon, L.B. (1997) *Teaching in Further Education*, 5th Ed. London: Cassell
- DeYoung, S. (1990) *Teaching Nursing*. California: Redwood City
- Denzin, N.K. & Lincoln, Y.S. (1994) *Handbook of qualitative research*. London: Sage
- Dewey, J. (1933) cited in Palmer, A., Burns, S. Bulman, C. (1994) *Reflective Practice in Nursing*. Oxford: Blackwell Science
- Department of Health (2000) *Comprehensive Critical Care: A review of critical care services*. DH; London
- Department of Health (2001) *The Nursing Contribution to the Provision of Comprehensive Critical Care: A review of critical care services*. DH: London
- Department of Health and Modernisation Agency (2003) *The Outreach Report*. DH: London

Department of Health (2004a) *Knowledge and Skills Framework*. DH: London

Department of Health (2004b) *NHS Emergency Pressures* [online] Available www.dh.gov.uk/PolicyAndGuidance/OrganisationPolicy/EmergencyCare/NHSEmergencyPressures [Accessed 19th July 2010]

Department of Health (2008) *High Quality Care for All*. DH: London

Dickoff J., James P. & Wiedenbach E. (1968) 'Theory in a Practice Discipline. Part 1, Practice Orientated Theory' *Nursing Research*, 11, (5) pp.415-434

Dirkx, J. (2006) 'Engaging emotions in adult nursing: A jungian perspective on emotion and transformative learning' *New directions for adult and continuing education*, 109, pp.15-26

Dreyfus S. & Dreyfus H. (1980) A five stage model of the mental activities involved in direct skill acquisition. Washington, DC: Storming Media

Dreher, M. (2002) 'Cultural competence in nursing: Foundation or fallacy?' *Nursing Outlook*, 50, (5) pp.181-186

Drennan, J. (2008) 'Professional and academic destination of masters in nursing graduates: a national survey' *Nurse Education Today*, 28 (16) pp.751-759

Drennan, J. & Hyde, A. (2009) 'The fragmented discourse of the 'knowledgeable doer': nursing academics' and nurse managers' perspectives on a master's education for nurses' *Advances in Health Science Education*, 14 (2) pp.173-186

Duffy, K. (2004) *Failing students: a qualitative study of factors that influence the decisions regarding assessment of students' competence in practice*. NMC: London

Edwards, A. & Knight, P. (1995) *The assessment of competence in higher education*. London: Kogan Page

Eraut, M. (1994) *Developing Professional Knowledge and Competence*. London: Falmer Press

Eraut, M. (1998) 'Concepts of Competence' *Journal of Interprofessional Care*, 12, pp.127-139

Epstein R.M. & Hundert E.M. (2002) 'Defining and Assessing Professional Competence' *JAMA*, 287 pp.226-235

Falchikov, N. (2005) *Improving assessment through student involvement*. London: Routledge

Fink, M. (2005) *Conducting Research Literature Reviews: From the internet to paper*, 2nd Ed. London: Sage

Fletcher, R. (2007) 'Advancing nursing skills on the medical assessment unit' *Nursing Times*, 103, pp.32-33

Folkman, S. & Lazarus, R.L. (1985) 'If it changes it must be a process: study of emotion and coping during three stages of a college examination' *Journal of Personality and Social Psychology*, 48, pp.150-170

Furze, G. & Pearcey P. (1999) 'Continuing education in nursing: a review of the literature' *Journal of Advanced Nursing*, 29, pp.355-363

Gabriel, Y. & Griffiths, D.S. (2002) 'Emotion, learning and organising' *Learning organisation*, 9, (5) pp.214-221

Gagne, R. (1985) *The conditions of learning and theory of instruction*, 4th Ed. New York: Holt

Gannon, C., Draper, P.R., Watson, R., Proctor, S. & Norman, I.J. (2001) 'Putting portfolios in their place' *Nurse Education Today*, 21, pp.534-540

Garrard, C. & Young, D. (1998) 'Editorial: Suboptimal care of patients before admission to ICU' *BMJ*, 316, pp.1814-1842

Garside J.R., Nhemachena, J.Z.Z., Williams, J. & Topping A.E. (2009) 'Repositioning assessment: Giving students the choice of assessment methods' *Nurse Education in Practice*, 9, pp.141-148

Garside J.R. & Prescott, S.F. (2008) 'Improving the care of the acutely ill patients outside ICU settings' *Nursing Times*, 104, (22), pp.25-26

Gerrish K., McManus, M. & Ashworth, P. (2003) 'Creating what sort of a professional? Masters level education as professionalising strategy' *Nursing Inquiry*, 10 (2) pp. 103-112

Gibbs, G. (1995) *Assessing student centred courses*, Oxford centre for staff development.

Ghazi F. & Henshaw, L. (1998) 'How to keep student nurses motivated' *Nursing Standard*, 1, pp.43-48

Gillham, B. (2000) *Case Study Research Methods*. London: Continuum

Goldhill D.R. & Sumner A. (1998) Outcome of intensive care patients in a group of British intensive care units. *Critical Care Medicine*. 26. pp1337-1345.

- Goldhill, D.R., Worthington, L., Mulcahy, A., Tarling, M. & Sumner, A. (1999) 'The patient at risk team: identifying and managing seriously ill ward patients' *Anaesthesia*, 54, pp.853-860
- Goldhill, D.R. & McNarry, A.F. (2004) 'Physiological abnormalities in early warning scores related to mortality in adult inpatients' *British Journal of Anaesthesia*, 92, pp.882-4
- Gonczi, A., Heger, P. & Athanasou, J. (1993) The development of competency-based assessment strategies for the professions. *National Office of Overseas Skills Recognition Research Paper No 8*, Canberra, Australian Government Publishing Services
- Gorard, C. & Young, D. (1999) 'Letters: Suboptimal ward care of critically ill patients' *BMJ*, 318, pp.51
- Gray, D.E. (2009) *Doing Research in the Real World*, 2ndEd. London: Sage
- Guba, E.G. (1981) 'Criteria for assessing the trustworthiness of naturalistic enquiries' *Educational Resources Information Centre, Annual Review*, 29 (2), pp.75-91
- Hand, H. (2006) 'Promoting effective teaching and learning in the clinical setting' *Nursing Standard*, 20, (39) pp.55-63
- Hardwick, S. & Jordan, S. (2002) 'The impact of part-time post-registration degrees on practice' *Journal of Advanced Nursing*, 38, (5) pp.524-535
- Hembree, R. (1988) 'Correlates, causes, effects, and treatment of test anxiety' *Review of Educational Research*, 58, pp.47-77
- Heron, J. (1999) *The complete facilitators handbook*. London: Kogan Page
- Hicks, C. and Hennessey, D. (2001) 'An alternative technique for evaluating the effectiveness of continuing professional development courses for health professionals: a pilot study with practice nurses' *Journal of Nursing Management*, 9, pp.39-41
- Hillman K., Bristow P.J. Chey T., Daffurn K., Jacques T., Norman S., Bishop G & Simmons O. (2002) 'Duration of life threatening antecedents prior to intensive care admission' *Intensive Care Medicine*, 28, pp.1629-34
- Hincliffe, S. (1999) *The practitioner as a teacher*, 2nd Ed. London: Bailliere Tindall
- Hincliffe, S. (2004) *The practitioner as a teacher*, 3rd Ed. London: Elsevier
- Hoepfl, M. (1997) 'Choosing qualitative research: A primer for technology education researchers' *Journal of Technology Education*, 9, (1) pp.47-63

- Holloway I. & Wheeler, S. (2002) *Qualitative Research in Nursing*, 2nd Ed. Oxford: Blackwell
- Huberman, M. (1996). 'Moving Mainstream; Taking a closer look at teacher research' *Language Arts*, 73, pp.124-140
- Jarvis, P., Holford, J. & Griffin, C. (2003) *The Theory and Practice of Learning*, 2nd Ed. London: Kogan Page
- Kause, J., Smith, G., Prytherch, D., Parr, M., Flabouris, A. & Hillman, K. For the Intensive Care Society (UK) & Australian and New Zealand Intensive Care Society Clinical Trials Group ACADEMIA Study investigators. (2004) 'A comparison of Antecedents to Cardiac Arrest, Deaths and Emergency Intensive Care Admissions in Australia and New Zealand and the United Kingdom – the ACADEMIA study' *Resuscitation*, 62, pp.275-282
- Kenyon G.M. & Randall L.W. (1997) *Restorying our lives: Personal Growth Through Autobiographical Reflection*. London: Praeger
- Knowles, M.S. (1984) *Andragogy in Action. Applying modern principles of adult education*. San Francisco: Jossey Bass
- Krapp, A. (2005) 'Basic needs and the development of interest and intrinsic motivational orientations' *Learning and Instruction*, 15, pp.381-395
- Kumar P. & Clarke M. (2006) *Acute Clinical Medicine*. London: Saunders Elsevier
- Lambert, D. & Lines, D. (2000) *Understanding Assessment*. London: Routledge-Falmer
- Lammers, R.L. (2007) 'Simulation: The New Teaching Tool' *Annals of Emergency Medicine*, 49, (4) pp.505-506
- Lazarus, R S, (1966) *Psychological Stress and the Coping Process*. New York: McGraw-Hill
- Lee, P. (2005) 'The process of Gatekeeping in Healthcare Research' *Nursing Times*, 101, (32) pp.36
- Leman P. (2007) 'Editorial: Emergency care in the first 48 hours' *BMJ*, 334, pp.218-219
- Lincoln, Y.S. & Guba, E.G. (1985) *Naturalistic Inquiry*. London: Sage
- Linn, R. & Gronlund, N. (2000) *Measurement and assessment in teaching*. Upper Saddle River, 8th Ed. New Jersey: Merrill

- LoBiondo-Wood, G. & Haber, J. (2006) *Nursing Research: Methods and Critical Appraisal for Evidence Based Practice*, 6th Ed. Philadelphia: Mosby
- Mackway-Jones, K. & Walker, M. (1998) *Pocket Guide to Teaching for Medical Instructors*. London: BMJ
- Maclellan, E. (2004) How convincing is alternative assessment for use in higher education? *Assessment and evaluation in Higher Education*, 29, (3) pp311-321.
- Manley, K. & Garbett, R. (2000) 'Paying Peter and Paul; Reconciling concepts of expertise with competency for a clinical career structure' *Journal of Clinical Nursing*, 9, pp.347-359
- Mason-Whitehead, E., McIntosh, A., Bryan, A & Mason, T. (2008) *Key Concepts in Nursing*. London: Sage
- Mayeroff, M.S. (1971) *On caring*. New York: Harper Perennial
- McAllister, M. (1998) 'Competency Standards: clarifying the issues' *Contemporary Nurse*, 7 (3) pp.131-137
- McArthur-Rouse, F. (2001) 'Critical care outreach services and early warning scoring systems: a review of the literature' *Journal of Advanced Nursing*, 36, (5) pp.696-704
- McArthur-Rouse, F. & Prosser, S. (2007) *Assessing and Managing the Acutely Ill Adult Surgical Patient*. Oxford: Blackwell
- McCallum, J. (2007) 'The debate in favour of using simulation education in pre-registration adult nursing' *Nurse Education Today*, 27, (8) pp.825-831
- McColl, E., Jacoby, A., Thomas, L. Souter, J., Bamford, C., Steen, N., Thomas, R., Harvey, E., Garratt, A., & Bond, J. (2001) 'Design and use of Questionnaires: a review of best practice applicable to surveys of health service staff and patients' *Health Technology Assessment NHS R&D HTA Programme*, 5, 31
- McGloin, H., Adam S.K. & Singer, M. (1999) 'Unexpected Deaths and referrals to intensive care of patients on general wards. Are some cases potentially avoidable' *Journal Royal College of Physicians*, 33, (3) pp.255-259
- McGloin, S. (2008) 'The trustworthiness of case study methodology' *Qualitative Research*, 16 (1), pp.45-55
- McGrath, A., Reid, N. & Boore, J. (2003) 'Occupational stress in nursing' *International Journal of Nursing Studies*, 40, pp.555-565
- McKeachie, W.J. (1994) *Teaching Tips*, 9th Ed. Lexington, MA: Heath

- McMullan, M., Endacott, R. Gray, M.A. & Jasper M.A. (2003) 'Portfolios and assessment of competence: a review of the literature' *Journal of Advanced Nursing*, 41, (3) pp.283-294
- McQuillan, P., Pilkington, S., Allan, A., Taylor, B., Short, A., Morgan, G., Neilson, M., Barrett, D. & Smith, G. (1998) 'Confidential inquiry into quality of care before admission to intensive care' *BMJ*, 316, pp.1853-1858
- McVicar, A. (2003) 'Workplace stress in nursing: A literature review' *Journal of Advanced Nursing*, 44, (6) pp.633-642
- Meerabau, E. (2001) 'Back to bedpans: the debates over pre-registration nursing education in England' *Journal of Advanced Nursing*, 34, (4) pp.427-435
- Merriam, S.B. (1988) *Case Study Research in Education: A Qualitative Approach*. San Fransico, CA: Jossey-Bass
- Merriam, S.B. & Carrarella, R.S. (1991) *Learning in Adulthood*, 2nd Ed. Oxford: Jossey-Bass
- Mid Yorkshire hospital NHS Trust (2009) [online] Available at www.midyorks.nhs.uk, [accessed 14.01.09]
- Milburn, A. (2003) *Choice for all, speech to NHS Chief Executives*. DH: London
- Miles, M.B. & Huberman A.M. (1994) *An expanded sourcebook: qualitative data analysis*, 2nd Ed. London: Sage
- Miller, R.L. & Brewer, J.D. Eds (2003) *The A-Z of Social Research*. London: Sage
- Milligan, F. (1998) 'Defining and assessing competence: the distraction of outcomes and the importance of educational process' *Nurse Education Today*, 18, pp.273-280
- Morgan, P.J. and Cleave-Hogg, D. (2002) 'Comparison between medical students' experience, confidence and competence' *Medical Education*, 36 pp534-9
- Morse, J. & Field, P. (2002) *Nursing Research; the application of qualitative approaches*, 2nd Ed. Cheltenham: Nelson Thornes
- Munhall, P. (2001) *Nursing Research: a qualitative perspective*, 2nd Ed. Sudbury: Jones and Barlett

- Murray, C., Grant, M.J., Howarth, M.L. & Leigh, J. (2008) 'The use of simulation as a teaching and learning approach to support practice learning' *Nurse Education in Practice*, 8, pp.5-8
- Murrell, K., Harris, L., & Tomsett, G. (1998) 'Using a portfolio to assess clinical practice' *Professional Nurse*, 13, pp.220-223
- National Confidential Enquiry into Patient Outcome and Death (NCEPOD) (2005) *An Acute Problem? A report of the National Confidential Enquiry into Patient Outcome and Death*. London: NCEPOD
- National Institute for Health and Clinical Excellence (NICE) (2007) *Acutely ill patients in hospital: recognition of and response to acute illness in adults in hospital*. London: DH
- National Institute for Health and Clinical Excellence (NICE) (2009) *Competencies for recognising and responding to acutely ill patients in hospital*. London: DH
- National Patient Safety Agency (NPSA) (2007a) *Safer care for the acutely ill patient; learning from serious incidents*. London: NPSA
- National Patient Safety Agency (NPSA) (2007b) *Recognising and responding appropriately to early signs of deterioration in hospitalised patients*. London: NPSA
- Nicklin, P. & Kenworthy, N. (1996) *Teaching and Assessing in Nursing Practice – An experiential approach*, 2nd Ed. London: Bailliere Tindall
- Nursing and Midwifery Council (NMC) (2002) *The Code of Professional Conduct*. London: NMC
- Nursing and Midwifery Council (NMC) (2005) *A-Z advice sheet*. London: NMC
- Nursing and Midwifery Council (NMC) (2008a) *The Code, Standards of conduct, performance and ethics*. London: NMC
- Nursing and Midwifery Council (NMC) (2008b) *Standards to support learning and assessment in practice*. London: NMC
- Nursing and Midwifery Council (NMC) (2008c) NMC circular: Advice on delegation for registered nurses and midwives. London: NMC
- Nursing and Midwifery Council (NMC) (2010a) *The PREP Handbook*. London: NMC
- Nursing and Midwifery Council (NMC) (2010b) Standards for pre-registration nursing education: draft for consultation. London: NMC

- Oxman, A.D. (1994) 'Systematic Reviews: Checklists for articles' *BMJ*, 309, pp.648-651
- Parahoo, K. (2006) *Essentials of Nursing Research: methods appraisal and utilisation*, 2nd Ed. Philadelphia: Lippincott, Williams and Wilkins
- Parr, M.B. & Sweeney, N.M. (2006) 'Use of Human Patient Simulation in an Undergraduate Critical Care Course' *Critical Care Nursing Quarterly*, 29, (3) pp.188-198
- Patton, M.Q. (2002) *Qualitative Research and Evaluation Methods*, 3rd Ed. London: Sage
- Pearson, H.T. (1984) 'Competence: a normative analysis' *University press of America*, pp.31-8
- Pekrun, R., Goetz, T., Titz, W. & Perry, R.P. (2002) 'Academic emotions in students self regulated learning and achievement: a program of qualitative and quantitative research' *Educational Psychologist*, 37, (2) pp.91-105
- Perkins, G.D. (2007) 'Simulation in resuscitation training' *Resuscitation*, 73, pp.202-211
- Perry, G.D. (2006) 'Fear and Learning: Trauma related factors in adult learning' *New directions for Adult and Continuing Education*, 110, pp.21-27
- Phillips, R.M., Davies, W. & Neary, M. (1996) 'The practitioner-teacher: a study of the introduction of mentors in the pre-registration nurse education programmes in Wales: part 2' *Journal of Advanced Nursing*, 23, (6) pp.1080-1088
- Piaget, J. (1981) *Intelligence and Affectivity: Their relationship during child development*. Palo Alto: CA
- Polit, D.F. & Beck, C.T. (2010) *Essentials of Nursing research – Appraising Evidence for Nursing Practice*, 7th Ed. London: Lippincott, Williams and Wilkins
- Popkewitz, T. (1994) 'Professionalism in teaching and teacher education: some notes on its history, ideology and potential' *Teaching and Teacher Education*, 10, (1) pp.1-14
- Prescott, S. & Garside, J. (2009) 'An evaluation of simulated clinical practice for adult branch students' *Nursing Standard*, 23, (22) pp.35-40
- Punch, K. (1998) *Introduction to Social Research: Quantitative and Qualitative Approaches*. London: Sage

- Quinn, F.M. (2001) *The principles and practice of nurse education*, 4th Ed. Cheltenham: Stanley Thornes
- Race, P., Brown, S., & Smith, B. (2005) *500 Tips on Assessment*, 2nd Ed. London: Routledge-Falmer
- Rafferty A., Clarke S.P., Coles, J., Ball, J., James, P., McKee, M. & Aiken, L.H. (2007) 'Outcomes of variation in hospital nurse staffing in English hospitals: Cross-sectional analysis of survey data and discharge records' *International Journal of Nursing Studies*, 44, pp.175-182
- Resuscitation Council United Kingdom (RCUK) (2005) *Prevention of in-hospital cardiac arrest and decisions about cardiopulmonary resuscitation*. Resuscitation Council: UK
- Redman, W. (1994) *Portfolios for Development: a guide for trainers and managers*. London: Kogan Page
- Reece, I. & Walker, S. (2002) *Teaching Training and Learning: A practical guide*. Tyne and Wear: Business Education Publishers
- Richardson V. (1994) 'Conducting research on practice' *Educational Researcher*, 23, (5) pp.5-10
- Roach, M.S. (1992) *The Human Act of Caring*. Ottawa, Ontario, Canadian Hospital Association Press
- Robson, C. (2002) *Real World Research*, 2nd Ed. Oxford: Blackwell
- Rogers, A. (1996) *Teaching Adults*, 2nd Ed. Buckingham: Open University Press
- Rowntree, D. (1987) *Assessing Students: How shall we know them*, 2nd Ed. London: Kogan Page
- Royal College of Nursing (RCN) (2006) *Setting appropriate ward nurse staffing levels in NHS acute trusts*. London: RCN
- Russell, S. (2006) 'An overview of adult-learning processes' *Urologic Nursing*, 26, (5) pp.349-352
- Ryle G. (1949) *The Concept of Mind*. London: Hutchinson
- Safford S.J. & Schlotfeldt R.M. (1960) 'Nursing service staffing and quality of nursing care' *Nursing Research*, 9 (3), pp.149-154
- Schoene, L.A. & Kanusky C.A. (2007) *The role of the clinical educator in evaluating nursing competency*. Houston Academy of Medicine. Texas: Texas Medical Center

Schutz, P. & Lanehart, S. (2002) 'Introduction: Emotions in Education' *Educational Psychologist*, 37, (2) pp.67-68

Seward E., Greig E., Preston S., Harris R.A., Borrill Z., Wardle T.D., Burnham R., Driscoll P., Harrison B. Lowe D.C. & Pearson M.G. (2003) 'A confidential study of deaths after emergency medical admission: issues related to quality of care' *Clinical Medicine*, 3 (5) pp.425-434

Shuck, B., Albornoz, C. & Winberg, M. (2007) *Emotions and their effect on adult learning: A constructivist perspective*. Sixth Annual College of Education Research Conference

Silber J.H, Williams S.V. Krakauer H. & Schwartz J.S. (1992) 'Hospital and patient characteristics associated with death after surgery. A study of adverse occurrence and failure to rescue' *Medical Care*, 30, pp. 615-29

Silverman, D. (2005) *Doing Qualitative Research*, 2nd Ed. London: Sage

Silverman, D. (2010) *Doing Qualitative Research*, 3rd Ed. London: Sage

Simons, H. (2009) *Case Study Research in Practice*. London: Sage

Smith, G. & Poplett, N. (2002) 'Knowledge of aspects of acute care in trainee doctors' *Postgrad Medical Journal*, 78, pp.335-338

Smith, G. (2000) *Alert Life-threatening Events. Recognition and Treatments: A Multi-professional Course in Care of the Acutely Ill Patient: Course Manual*. Portsmouth: Portsmouth Institute of Medicine, Health and Social Care Faculty of Science

Sørensen, A. (2009) 'Developing personal competence in nursing students through international clinical practice: with emphasis on communication and empathy' *Journal of Intercultural Communication*, (19), pp.1404-1634

Spradley, J. (1979) *The Ethnographic Interview*. Belmont, CA: Wadsworth

Stake, R.E. (1995) *The Art of Case Study Research*. London: Sage

Stefani, L.A.J. (1998) 'Assessment in Partnership with Learners' *Assessment and Evaluation in Higher Education*, 23, (4) pp.339-350

Strategic Health Authority (SHA) (2009) [online] Available www.yorksandhumber.nhs.uk/what_we_do/workforce_education_and_training/education_and_training/funding_for_training/ [Accessed 6th March 2009]

Struthers, C.W., Perry, R.P. & Menec, V.H. (2000) 'An examination of the relationship among academic stress, coping, motivation and performance in college' *Research in Higher Education*, 41, (5) pp.581-591

Struyven, K., Dochy, F. & Jansens, A.S. (2005) 'Students' perceptions about evaluation and assessment in higher education: a review' *Assessment & Evaluation in Higher Education*, 30, (4) pp.325-341

Sutherland, P. (1999) 'A study of the learning of mature adult students on a professional course' *Journal of further and higher education*, 23, (3) pp.381-389

Tennant, S. & Field, R. (2004) 'Continuing professional development: does it make a difference' *British Association of Critical Care Nurses*, 9, (4) pp.167-171

Tortora, G.J. & Derrickson, B. (2006) *Principles of Anatomy and Physiology*, 12th Ed. Hoboken: New Jersey

Topping, A., Watson, R., Albeit, G. & Garside, J. (2010) A Mapping and Evaluation Exercise in Yorkshire and Humber. Unpublished.

Tourangeau, A.E., Doran, D.M., Hall, L.M., O'Brien, P., Pringle, D., Tu, J.V. & Cranley, L.A. (2007) 'Impact of hospital nursing care in 30 day mortality for acute medical patients' *Journal of Advanced Nursing*, 57, (1) pp.32-44

Travers, M. (2001) *Qualitative research through case studies*. London: Sage

United Kingdom Central council for Nursing, Midwifery and Health Visiting (UKCC) (1986) *Project 2000: A new preparation for practice*, London, UKCC

United Kingdom Central council for Nursing, Midwifery and Health Visiting (UKCC) (1999) *Commission for Education: Fitness for Practice*. London: UKCC

University of Huddersfield (2009) [online] available at www.hud.ac.uk [accessed 19th December 2009]

Watson, D. (2006) 'The impact of accurate patient assessment on the quality of care' *Nursing Times*, 102, (6) pp.34-37

Watson, R., Stimpson, A., Topping, A., & Porock, D. (2002) 'Clinical competence assessment in nursing: a systematic review of the literature' *Journal of Advanced Nursing*, 39, (5) pp.421-431

Watson, R. (2002) 'Clinical competence: Starship enterprise or straitjacket?' *Nurse Education Today*, 22, pp.476-480

Weil, S. & McGill, I. eds (1989) *Making sense of experiential learning society for research into higher education*. Buckingham; Open University Press

Welland, S.J., Bethune, E., & Heggen, K. (2007) 'Do we need standardised examination for nurses. Assessment of learning in contemporary nurse education' *Nurse Education Today*, 27, pp.68-72

West, S.L. (2006) 'Physical Assessment: Whose role is it anyway' *British Journal of Nursing*, 15, (9) pp.502-508

Wood, I., Douglas, J., & Priest, H. (2004) 'Education and Training for acute care delivery: a needs analysis' *Nursing in Critical Care*, 9 (4) 159-166

Woodrow P.(2006) *Intensive Care Nursing: A framework for practice*, 2nd Ed. Oxon: Routledge

Yerkes, R.M. & Dodson, J.D. (1908) 'The relation of strength of stimulus to rapidity of habit-formation' *Journal of Comparative Neurology and Psychology*, 18, pp.459-482

Yin, R.K. (2003) *Case Study Research: Design and Methods*, 3rd Ed. London: Sage

Yin, R.K. (2009) *Case Study Research: Design and Methods*, 4th Ed. London: Sage

Appendices

Appendix 1 Module specifications

1.	Module Code	HHN1242
2	MODULE TITLE	PROFESSIONAL PRINCIPLES UNDERPINNING CLINICAL PRACTICE
3.	School (s) involved in delivery	School of Human & Health Sciences
4.	Name of Course in Professional Studies (Acute Illness, Stroke)	BSc (Hons) Professional Studies/Certificate
5.	Module Leader	
6.	Location for Delivery	Queensgate Campus
7.	Module Type	Optional - Core for the above awards.
8.	Credit Rating	20
9.	Level	Honours
10.	Learning Methods	Lectures/Seminars/Tutorials 20 hours Directed Study 20 hours Unsupervised 160 hours
11.	Pre-requisites	None
12.	Recommended Prior Study	None
13.	Co-requisites	None
14.	Professional Body Requirements	None
15.	Barred Combinations	None
16.	Graded or Non Graded	Graded

17. Synopsis

This module is for health or social practitioners who wish to develop a deeper understanding of how contemporary professional principles influence the assessment, care and management of a patient. The student will be able to critically analyse their own roles and responsibilities within the multi-professional team.

Emphasis is placed on promoting the students' awareness of influences at a local, national and international level that affects the delivery of therapeutic care interventions for the patient. These will include professional, political, social, legal, moral, and financial areas. Whilst maintaining confidentiality, students will explore relevant examples from their own clinical practice.

18. Outline Syllabus

- Interpersonal and communication skills
- National and International agendas affecting relevant health care policy,

- provision and practice.
- Changing roles and responsibilities within a clinical practice.
- Accountability, confidentiality and record keeping.
- Influences of current socio-cultural, religious, ethical, legal and moral factors in the provision of care. For example advanced directives, euthanasia and allocation of resources.
- Professional principles relevant to clinical practice. For example (sepsis, pain management, infection control, early warning scores, health promotion).

19. Learning Outcomes

Knowledge and Understanding Outcomes

1. Debate the influences that inform current health care policy, provision and practice.
2. Critically appraise the role of the practitioner within integrated service provision in the context of multi-agency and disciplinary working practices.
3. Critically analyse care provision demonstrating an awareness of current political and moral philosophy, agendas, financial implications and constraints and social expectations.

Ability Outcomes

4. Critically apply professional principles and legal and ethical theories within clinical practice.
5. Identify and critically rationalise individual learning requirements

20. Assessment Strategy

20.1 Formative assessment

As negotiated by module leader

20.2 Summative Assessment

Assessment Tasks

The student will achieve the learning outcomes of this module in negotiation with the module leader. The outcome of these negotiations will be documented in the form of a learning contract. The learning contract will require the student to produce a 4000 word essay or equivalent.

Part One: Submission of the negotiated learning contract (Learning outcome 5)

Part Two: Submission of the outcome of the negotiations of the learning contract (Learning outcome 1-4)

Assessment Criteria

The generic assessment criteria and the learning outcomes will apply.

Identities of individuals and organisations should be anonymised (and) confidences respected. Consent should be obtained from individual patients/clients for use of any of their personal health information.

Assessment Weightings

Negotiated Learning Contract	20%
Outcomes from Negotiations of Learning Contract	80%

21. Learning Strategy

Lectures, Problem Based Exercises, Seminars, Tutorials

1.	Module Code	HHN1243
2.	MODULE TITLE	ASSESSMENT, CARE AND MANAGEMENT OF THE ACUTELY ILL PATIENT
3.	School Involved in Delivery	School of Human and Health Sciences
4.	Name of Course Illness)	BSc (Hons) Professional Studies Certificate in Professional Studies(Acute
5.	Module Leader	
6.	Location of Delivery	Queensgate Campus
7.	Module Type	Core
8.	Credit Rating	40
9.	Level	Honours
10.	Learning Methods	Lectures/Seminars/Tutorials 72 hours Directed Study (Blackboard) 18 hours Unsupervised 280 hours Alternative Clinical Placements 30hours
11.	Pre-requisites	None
12.	Recommended Prior Study	None
13.	Co-requisites	HHN1242 or equivalent
14.	Professional Body Requirements	None
15.	Barred Combinations	None.
16.	Graded or Non Graded	Graded

17. Module Synopsis

The focus of this module is on the assessment, care and management of an acutely ill patient within a hospital setting. Emphasis throughout the module is placed on accurate holistic assessment of the individual, and the development of subsequent management plans from which to provide efficient and effective therapeutic interventions. Clinical simulation will be used to support the student in the development of their skills.

In order to experience different care and treatment modalities, the student will undertake alternative clinical experiences. The student studying this module will be a health care practitioner with an appropriate professional qualification and relevant experience.

18. Outline Syllabus

- A structured, holistic approach to assessing and prioritising care of an acutely ill patient.
- Related anatomy and physiology.
- Disordered physiology related to common potentially life-threatening conditions, for example shock, respiratory failure, cardiovascular collapse.
- Inter-professional approach to care, including management of the health care team assisting in the assessment and treatment of the patient.
- Management of acute clinical scenarios, for example hypoxic, hypovolaemic and diabetic emergencies.

19. Learning Outcomes

Upon successful completion of the module, students will be able to:
Knowledge and Understanding Outcomes

1. Critically analyse aspects of disordered physiology, principles of accurate physiological and homeostatic measurement in relation to the care and management of persons suffering acute deterioration of their condition.
2. Critically examine the contribution that recent developments and current research in the care and management of acutely ill patients can make to the delivery of high quality care.
3. Critically analyse provision of holistic care by the multi-professional team for the acutely ill individual with due consideration to evidence based practice.

Ability Outcomes

4. Critically appraise and demonstrate safe, competent practice of the role of the health practitioner in the assessment, care and management of the acutely ill patient and justify the need for accurate record keeping.

20. Assessment Strategy

20.1 Formative Assessment

This module provides the student with the opportunity to be developed formatively and assessed summatively. Formative assessment will include peer and tutor feedback following scenario demonstration. Formative assessment will also provide the student with the opportunity to develop their portfolio.

20.2 Summative Assessment

Assessment Tasks

The students will be assessed in theory and in practice using a simulated clinical scenario.

Theory

Portfolio of evidence which addresses learning outcomes 1 to 3.

The portfolio must include evidence of work to the equivalent of 6000 words and must meet the criteria outlined below.

Simulated Clinical Scenario

Assess and initiate appropriate emergency treatment for an acutely ill simulated patient in the skills laboratory setting. Students will be assessed on their ability to assess, plan, implement and evaluate the treatment required. They will also be assessed on their management of the health care team assisting in the assessment and treatment of the patient.

Relates to Outcome 4.

Assessment Criteria

General assessment criteria will apply

In addition, the portfolio must show evidence of achieving outcomes 1-3. This will include evidence of an action plan agreed with their Personal Tutor demonstrating the module outcomes

The module outcomes

1. Critical analysis of current evidence/research relevant to the theory delivered.
2. Critical reflections on clinical events and treatments in their own practice locality and on alternate clinical placements.
3. Evidence of identifying and critically analysing appropriate Trust protocols or treatment pathways. For example the Management of Acute Anaphylaxis by a first responder.

Assessment Weightings

Portfolio of evidence	100%
Simulated Clinical Scenario	Pass/refer/fail

Students will be required to pass both elements of the module in order to gain credit of the module, but only the theory will be graded.

21. Learning Strategy

A combination of lectures, seminars, discussion, skills training and group work will be employed to facilitate learning.

Appendix 2 Course timetable

HHN 1242: Professional Principles Underpinning Clinical Practice	HHN 1243: Assessment, Care and Management of the Acutely Ill Patient	
Introduction to the Course / Resources - Library	Introduction to Course NICE Guidelines. NCEPOD	Airway and Respiratory A+P
Critical Analysis Skills/Course Assessments	Patient Assessment (ABCDE) Early Warning Score	A+P heart and Circulation
Research and Evidence Based Practice	Assessment and Management of Acute Respiratory Problems (until approx. 17:15)	Simulation training Introduction to Skills Lab. ABCDE approach to patient assessment.
Research and Evidence Based Practice	Simulation training Airway Management	Cardiac Monitoring and Rhythm recognition Management
Nursing the Acutely Ill Patient with a Mental Illness	Simulation training (Respiratory, auscultation and ABGs)	Acid Base Balance and Interpretation of ABGS
Accountability issues in acute care	12 Lead ECG	Acute Cardiac Disorders &
Associated Health Care Law/Ethics and Moral Reasoning	Simulation training Rhythm recognition	Rhythm recognition and ECG Interpretation
Modernisation of the NHS: Policies and Agendas NHS Control: Funding and Monitoring	Simulation Training ECG Interpretation	Treatment and Management of Shock
Breaking Bad News	Simulation training (Non-invasive ventilation)	Management of Acute Anaphylaxis by a first responder
Current issues in healthcare	Fluid Management and Patient Optimisation	Simulation training
End of life issues	Acute Renal Failure	GI Bleeds and Acute Clotting Disorders
Simulation training	Simulation training	Management of an In-Hospital Cardiac Arrest
DKA	Simulation training In-Hospital Cardiac Arrest	Peri-Arrest Arrhythmias
Simulation training Transporting the acutely ill patient	Simulation training Peri Arrest	Sepsis

Appendix 3 Tabular exemplars of the literature review

Exemplar Systematic review for the Quantitative evidence - Oxman et al (1994)

	1. Clear focused research question?	2. Did the review include the right type of study?	3. Did the reviewers try to identify all relevant studies?	4. Did the reviewers assess the quality of the included studies?	5. If the results of the studies have been combined, was it reasonable to do so?	6. What are the main results of the review?	7. Could the results be due to chance?	8. Can the results be applied to the local population?	9. Were all important outcomes considered?	10. Should policy or practice change as a review of the evidence contained in this review?
McQuillan et al 1998	Quality of care before admission to intensive care. 100 patients, consecutive admissions. Local ethical approval	2 UK hospitals, led by physicians. Confidential inquiry undertaken by 2 external assessors Data collection in 1992/93 Structured interviews with medical teams caring for identified patients N=100	No lit review although other studies and national reports/guidelines integrated into discussion	Yes – identified own limitations of similar studies	Results presented in percentages. Only 2 assessors made decisions of suboptimal care. 100 patients relatively small sample	54% of patients received suboptimal care	Relies of opinions of assessors however strict criteria	In 2 hospitals in south of England. Can take themes and transfer to other areas	Appeared to be relevant and considered	Would need to be repeated in other organisations to be truly generalisable
Blegen et al 1998	Nurse staff and Patient outcomes RN and Assistants – 42 nursing care units in one hospital. Approval from institutional review board	US based Acute and non acute areas included Measured: Staffing levels compared to quality assurance reports, e.g. falls, deaths	Large review Range of recent and old studies 1960/70's (relevant historical view)	Yes – identifies some shortfalls of literature included in general discussion	Detailed statistics and tabulations presented	Except falls all adverse patient outcomes, decubiti, complaints and deaths were affected by staffing levels	Unlikely due to large amount of data analysed	All from 1 hospital – reducing generalisability	The higher the RN skill mix, the lower the incidence of adverse occurrences	Must be replicated in other settings prior to policy change

McGloin 1999	Unexpected deaths and referrals to ICU on general wards No ethical approval discussed	Audit – 6 months London based teaching hospital Multi professional	Not explicit	Not explicit	317 of 477 hospital deaths on general wards, 13 of the 317 considered unavoidable – gradual deterioration noted but not acted upon	31 of 86 admissions to ICU deemed to receive sub-optimal care prior to admission	Possibly due to relatively small sample although similar to McQuillan findings	All from 1 hospital – reducing generalisability	Clinical indicators of acute deterioration are not recognised or acted upon	Would need to be repeated in other organisations to be truly generalisable
Allen 2004	Recognising and managing adult patients who are critically sick	Nursing Times – not peer review Opinion paper from Lecturer in critical care nursing	Limited but relevant studies identified	Not explicit	Not relevant	Not relevant	Not relevant	Not relevant	Explains systematic review of patients ABCDE	
Tourangeau et al 2007	Impact of hospital nursing care on 30 day mortality Canadian study Acute medical patients N=46,993. N=5,980 Nurses	Four data sets calculating risk and case mix and 30-day mortality rates	In depth and relevant review	Yes in discussion	Results clearly presented in tabular and discussion form	Staff levels and level of skill mix impacted mortality, 10% increase proportion of RN associated with 6 fewer deaths/ 1000 discharged patients	Unlikely due to large sample and mixed data sources	Probably in Canada although needs repeating in UK for true transferability	Yes	Awareness however difficult to implement
Aiken 2003	Educational levels of hospital nurses and surgical patient mortality 168 US hospital over 18 months	Cross sectional data analysis. Patients N=232,342 linked to admin and survey data related to ed levels and staffing	Reasonable number but little critique shown	No	Tabular form and description. Mixed % and p Values	hospitals with higher proportions of nurses educated at baccalaureate level or higher, are associated with improved patient outcomes and lower mortality rates	Unlikely due to large numbers	Needs reproducing in UK Surgical areas only	Yes	Awareness however difficult to implement

CASP	Was there a clear statement of the aims of the research	Is a qualitative method appropriate	Was the research design appropriate to address the aims of the research	Was the recruitment strategy appropriate to the aims of the research?	Were the data collected in a way that addressed the research issue	Has the relationship between researcher and participants been adequately considered	Have ethical issues been taken into account	Data Analysis Was the data analysis sufficiently rigorous	Is there a clear statement of findings	
Wood et al (2004)	Education and training for acute care delivery, commissioned by the local Strategic Health Authority to influence training needs	Qualitative focus groups different levels of staff (N=25). Yes	Yes -although survey may increase sample	A host from each trust recruited participants - ? hand picked	Yes	External interviewer – no discussions on how questions were compiled	Local Research & Ethical approval	NVivo: Themed and intercoded Reliability	Yes – clear tables and discussions	Not generalisable Some similarities may be transferred to other acute care settings

Appendix 4 - Four stages of shock (Adapted from McArthur-Rouse and Prosser, 2007)

Stage of Shock	Physiology	Signs and Symptoms
Initial stage The shock is in the initial stage	Cells initially become hypoxic and ATP production reduces. Cells then start to convert ATP into energy by anaerobic respiration. Lactic acid is produced as a by-product and begins to accumulate	There are few signs and symptoms at the initial stage; there may be a subtle increase in the respiratory rate and heart rate, however, if the shock continues and is not reversed the patient will develop abnormal signs and symptoms
Compensatory stage The body tries to intervene and overcome the progressing shock	Metabolic acidosis occurs due to build-up of lactic acid. Initial hypotension is detected by the baroreceptors and corrected by the release of adrenaline and noradrenaline. This causes vasoconstriction at the skin, GI tract and kidneys, which concentrates blood supply to the heart and brain as the brain is particularly susceptible to hypoxia and cell damaged.	11. Increased hyperventilation to compensate for metabolic acidosis and hypoxia 12. Tachycardia due to increased catecholamine release (adrenaline) and attempt to increase cardiac output 13. Delayed capillary refill time >2 seconds due to vasoconstriction 14. Decreased urine output 15. Personality changes, Confusion, agitation due to cerebral hypoxia NB. Blood Pressure will be maintained due to compensatory mechanisms
Progressive stage The compensatory mechanisms that the body initially implemented are failing	If the originating problem of the shock, e.g. blood loss, has not been corrected, organ perfusion will reduce, resulting in wide spread hypoxia and multi organ failure.	16. All the above 17. Hypotension 18. Severe metabolic acidosis 19. Severe hypoxia
Refractory or irreversible stage	The vital organs have failed and the shock can no longer be reversed. Death is imminent	Gross abnormal observations and metabolic disturbances

Appendix 5
University Research Office Approval & Human and Health Sciences Research Ethics
Panel Forms (SREP)



05 April 2007

Our Ref: IP/register

Professor P Bradshaw
School of Human & Health Sciences
University of Huddersfield

Dear Colleague

APPROVAL OF RESEARCH PROGRAMME

I am pleased to confirm approval of this research programme for Doctor of Education.

NAME: Joanne Garside
TITLE OF PROGRAMME OF RESEARCH: Developing optimal skills in acute care - an analytical case study of an 'Acute Illness' course
CANDIDATE'S SUPERVISORS:

- (1) (DIRECTOR OF STUDIES) Professor P Bradshaw
School of Human & Health Sciences
University of Huddersfield
- (2) Dr R Fisher
School of Education & Professional Development
University of Huddersfield

COLLABORATING INSTITUTION N/A

DATE OF ENROLMENT AND DURATION OF PROGRAMME:

The period of enrolment will be at least 42 months with effect from September 2005 subject to the conditions specified in Regulation F2.2.1.



Queensgate Huddersfield HD1 3DH UK Telephone +44 (0) 1484 422288 Fax +44 (0) 1484 516151
Vice-Chancellor: Professor Bob Cryan BSc MBA PhD DSc
An exempt charity and a centre of excellence for vocational education and research



THE UNIVERSITY OF HUDDERSFIELD
School of Human and Health Sciences – School Research Ethics Panel

OUTLINE OF PROPOSAL VERSION 2.0

Name of applicant: **Joanne Garside**

Title of study: Developing optimal skills in acute care – an analytical case study of an ‘Acute Illness’ Course

Department: School of Human & Health Sciences

Date sent: 20th June 2007

Issue	Please provide sufficient detail for SREP to assess strategies used to address ethical issues in the research proposal
Researcher(s) details	<p>Joanne Garside RGN DPNS BSc MSc Senior Lecturer Adult Nursing Department of Human & Health Sciences HW3/26 Queensgate Huddersfield Tel: 01484 473567 Email: j.garside@hud.ac.uk</p> <p>I am undertaking the research as part of the Doctorate of Education course</p>
Supervisor details	<p>Director of Studies: Professor Peter Bradshaw Professor in Healthcare Policy HW3/10 Department of Human & Health Sciences Queensgate Huddersfield Tel: 01484 472285 Email: p.l.bradshaw@hud.ac.uk</p> <p>Second supervisor: Dr Roy Fisher LS1/35 School of Education & Professional Development Queensgate Huddersfield Tel: 01484 478269 Email: r.fisher@hud.ac.uk</p>
Aim / objectives	<p>The aim of the research is to investigate the rationale for the inception and delivery of the Acute illness course and the issues it is required to address.</p> <p>The key objectives of the case study are to investigate and critically analyse:</p> <ul style="list-style-type: none"> • Policies and practices of nurses’ knowledge, skills and competence when managing acutely ill patients

	<ul style="list-style-type: none"> • The biographical characteristics of recruits undertaking the Acute Illness course • The teaching, learning and assessment methods used on the Acute Illness course • How the Acute Illness course is thought to develop practitioners' skills and competence from the perspectives of the former students and their managers
Brief overview of research methodology	<p>The design and method:</p> <p>An interpretivist methodology will be used to give structure to the investigation</p> <p>The following section will outline the different phases that the study will take:</p> <p>Literature review:</p> <p>An in-depth literature review of National and local policies and practices will take place to analyse the current evidence available on the provision of acute care. The literature review and all the subsequent phases data analysis will facilitate the modification of the questions that inform the instrument design and guide areas for investigation during the following phase.</p> <p>Phase One:</p> <p>Phase One will comprise data collection by semi-structured interviews of the former students who have previously undertaken the Acute Illness course. The interview data will be collected following informed consent by audiotape and hand written notes that may provide information on any non-verbal communications. Participants who do not consent to audiorecording will be asked for consent to a handwritten record of the interview. The transcripts from the interviews will be analysed using the computer-assisted package NVivo7.</p> <p>Phase Two:</p> <p>Phase 2 will also use interviews but the participants will be the managers of the former students of the Acute Illness course. The structure of the interview will focus themes and areas described in phase 1, which will be adapted following data analysis.</p> <p>The key to the triangulation of the findings will be the managers' perspective, the manager is in a position to oversee the student's development and this part of the data collection enables the opportunity to discuss their perspectives of whether the Acute Illness course has had any influence on the student's professional development. Managers' interviews will only be undertaken after the former students' interview.</p> <p>Case study report</p> <p>When collating and analysing the data to the case study report, there will be a continuous interaction between theoretical issues being studied and</p>

	<p>the data being collected. Sufficient care will be exercised against the bias of the researcher. It is recognised within the interpretivist tradition however, that it is important for the researcher to have a deep and reflexive understanding of the subject area, such as the circumstances surrounding and the rationale behind the nurses' competence when caring for an acutely ill patient.</p> <p>The transcripts from the interview will be analysed using an up to date version of a computer-assisted package, NVivo7. The aim of the data analysis is to transform the data from the transcripts into findings, searching for patterns and themes, allowing coding and categorising of the anticipated large amount of transcripts collected from the interviews.</p> <p>It is recognised that although there may be some findings that are transferable to other settings but overall the study will not be generalisable.</p> <p>Estimated Timescales</p> <ul style="list-style-type: none"> • March 2007 – ResR Approved by Research Committee (SEPD) • Sept 2007 to Dec 2007 – COREC – Literature review and invite participants phase One • Jan to Sept 2008 – Phase One • Sept to Mar 2009 – Phase Two • Mar 2009 to Sept 2009 – Data analysis and case study report
Permissions for study	<p>The proposal has been accepted by the School of Education and Professional Developments (SEPD) Research Committee chaired by Professor James Avis</p> <p>On advice of the Chair the application requires submissions to an NHS Research Ethics Committee because it involves NHS Staff – All draft documentation to support the NHS REC application is attached for initial approval from this committee. The application will not be submitted until approval from SREP</p>
Access to participants	<p>The applicant will be the only interviewer for the study. The potential participants in the study will be identified from former students and managers from the Acute Illness Course. The potential participants will be approached by letter; information sheet and consent form requesting participation. All participants will be required to read the information sheet and sign the consent form (see attached) prior to participation in the research. The participants will be recruited on return of the consent form.</p> <p>The sample for the interviews will be taken from the consenting former course participants (approx n=20). The participants will be from Calderdale and Huddersfield NHS Foundation Trust and Mid Yorkshire NHS Trust and they will be invited to interview on University premises. The participants will only be invited on completion of the Acute Illness course.</p>

	<p>A pilot of the interview will be undertaken with two of the participants, which will allow the opportunity to adapt the questions for future interviews. The former students' line managers will also be invited to participate in the research (approx n=15).</p> <p>The information sheet confirms that the study is entirely voluntary and they are under no obligation to participate.</p>
Confidentiality	See information sheet and consent form
Anonymity	See information sheet and consent form
Psychological support for participants	<p>Heightened emotional awareness – see risk assessment form</p> <p>Potential risk of highlighting poor practice – see risk assessment form</p>
Researcher safety / support (attach complete University Risk Analysis and Management form)	The research will be undertaken on University campus.
Please supply copies of all relevant supporting documentation electronically. If this is not available electronically, please provide explanation and supply hard copy	
Information sheet	See attached
Consent form	See attached
Letters	See attached
Questionnaire	N/A
Interview schedule	See attached
Dissemination of results	<p>Transcripts will be available to all participants and Academic Supervisors</p> <p>Papers will be submitted for peer review publication and abstracts will be submitted conference presentations</p>
Other issues	
Where application is to be made to NHS Research Ethics Committee	Specify NHS REC documents submitted:
All documentation has been read by supervisor (where applicable)	Please confirm. This proposal will not be considered unless the supervisor has submitted a report confirming that (s)he has read all documents and supports their submission to SREP



Information Sheet – Former Students VERSION 2.0

Background to the research

Over the last two decades the National Health Service (NHS) has seen many major developments nationwide, particularly within acute and critical care areas. As treatments and technologies develop, there are new approaches to interventions for acutely ill patients because they no longer depend totally on Intensive care (ICU) or High dependency (HDU) units. Nowadays acutely ill patients are cared for on assessment units and general wards throughout a variety of medical and surgical settings. As these changes evolve, healthcare practitioners working within these clinical environments are required to have a new repertoire of knowledge and skills to apply to the rapidly changing demands of their daily workload.

The University of Huddersfield responded to changes with NHS organisations challenges to meeting the acutely ill patient's requirements by providing from September 2006, the Acute Illness course. The Acute Illness course aimed

to look specifically at the assessment, care and management of acutely ill individuals within all secondary sector acute care settings.

With the major changes to the acute and critical care services within the assessment units and general hospital wards and the development of the acute Illness course, the opportunity thus arises to investigate the subject area in depth. This will be done by a large research study.

The Research Method

This research study will explore former students and managers perspectives of the impact the 'Acute illness' course has on the development of knowledge, skill and competence, predominantly when managing acutely ill patients within assessment units and general wards. The study will also investigate any association to the teaching, learning and assessment of the nurses' knowledge, skills and professional competence when nurses undertake the Acute Illness course will also be explored.

Key areas that will be investigated during the research will be:

The current policies and practices of nurses knowledge, skills and competence when managing acutely ill patients –This aspect will give the opportunity to discuss opinions of current practices and the policies that are available (or not) to support practitioners in clinical areas. The focus will be specifically on the nursing profession and the nurses' knowledge skills and competence when caring

for acutely ill patients within assessment units and general hospital wards.

The biographical characteristics of recruits undertaking the Acute Illness course – This aspect will investigate what students motives were for undertaking the course, for example did working towards a degree or to increasing current level of clinical skills.

The study will be review opinions on the variety of approaches to teaching and learning methods that were used in the course as well as the assessment methods used on the course.

The study will investigate if and how former students think the Acute Illness course has improved knowledge, skills and competence and any development that has been made as a result of the undertaking the Acute Illness course.

The second part of the study will be undertaken inviting the former students' line manager to be interviewed. The structure of the interview will focus on the same themes and areas as the former student. However the main area that will be investigated by the manager is an investigation of if the Acute Illness course helped improve the former students' skills and competence. The manager is in a key position to oversee development and this part of the research enables the opportunity to discuss their perspectives of whether the Acute Illness course has had any influence on practice.

Questions

Do I have to take part in the research?

Your participation in the research would be greatly appreciated and the more former students that take part will increase the quality of the research. Although taking part in the study is completely voluntary and you have the right to withdraw from the research at any time, without any repercussions. You are also within your right to withdraw the information you provide at any time.

What will be involved?

The research will involve you being invited to the University to meet myself; if you are unable to get to the University we will negotiate a mutually beneficial venue. I will ask you a series of questions that will be broadly based around the subjects discussed earlier. During the interview you will also be given the opportunity to discuss any areas about the Acute Illness course that has not been mentioned. The process sounds very formal however the interview will take a semi-structured form, so we will be able to discuss areas that you think are valuable. The interview will take approximately one hour dependant on how much you would like to discuss.

How will the information be collected?

The interview will be tape-recorded. The discussions from the tapes will be word processed, these transcripts will be returned to you for accuracy of interpretation and at this point you will be able to change any details that you do not agree with. All tape recordings and

data will be kept in a locked cupboard within the University and only my supervisor and I will have access to information that will be able to directly identify you.

Will any information I give be identifiable?

As you are aware your manager may also be invited to participate in the research. Your manager will not be told anything that you say during your interview. This will also be applicable from your manager's perspective you will not be informed of anything that they say during their interview. The finished report and analysis will be written up into a thesis. The information you provide maybe quoted, although all information that may lead to your identification will be removed and pseudonym will be used. The Acute Illness course is a new initiative there is a lot of interest in this development, therefore some papers may be submitted for publications and abstracts will be submitted conference presentations.

What if I have any concerns at any stage of the research?

If you would like any further information please contact myself on the details on the back of this leaflet

Will any of the information you give at interview be divulged?

All the interviews will be conducted under the professional code of conduct (NMC 2004).

What if I don't want my manager involved?

Your manager will not be contacted if you have any objection. Therefore if you do not want me to approach them please do not tick the last statement on the consent form. This will have no repercussions in your participation in the study

What do I need to do now?

If you feel that you would like to be involved in the study please complete the attached consent form and return it in the stamped addressed envelope provided. I will then contact you at your indicated contact details to answer any questions that you may have and to negotiate a mutually suitable time to meet.

Researchers Details:

Joanne Garside
HW3/26
University of Huddersfield
Queensgate
Huddersfield
HD1 3DH

Tel: 01484 473567
Email: j.Garside@hud.ac.uk



Information Sheet – Managers VERSION 2.0

Background to the research

Over the last two decades the National Health Service (NHS) has seen many major developments nationwide, particularly within acute and critical care areas. As treatments and technologies develop, there are new approaches to interventions for acutely ill patients because they no longer depend totally on Intensive care (ICU) or High dependency (HDU) units. Nowadays acutely ill patients are cared for on assessment units and general wards throughout a variety of medical and surgical settings. As these changes evolve, healthcare practitioners working within these clinical environments are required to have a new repertoire of knowledge and skills to apply to the rapidly changing demands of their daily workload.

The University of Huddersfield responded to changes with NHS organisations challenges to meeting the acutely ill patient's requirements by providing from September 2006, the Acute

Illness course. The Acute Illness course aimed to look specifically at the assessment, care and management of acutely ill individuals within all secondary sector acute care settings.

With the major changes to the acute and critical care services within the assessment units and general hospital wards and the development of the acute Illness course, the opportunity thus arises to investigate the subject area in depth. This will be done by a large research study.

The Research Method

This research study will explore former students and managers perspectives of the impact the 'Acute illness' course has on the development of knowledge, skill and competence, predominantly when managing acutely ill patients within assessment units and general wards. The study will also investigate any association to the teaching, learning and assessment of the nurses' knowledge, skills and professional competence when nurses undertake the Acute Illness course will also be explored.

The first part of the study will be undertaken by inviting former students from the Acute Illness course to be interviewed. They will be asked questions on their perceptions of if and how the acute illness course helped their development.

The second part of the study will invite the line managers of the former students to be interviewed. The main area that will be investigated from managers' perspective is if the Acute Illness course helped improve the former

students' skills and competence. The manager is in a key position to oversee the former students' development. This part of the research enables the opportunity to discuss different perspectives of whether the Acute Illness course has had any influence on the former students practice.

Questions

Do I have to take part in the research?

Your participation in the research would be greatly appreciated and the more managers that take part will increase the quality of the research. Although taking part in the study is completely voluntary and you have the right to withdraw from the research at any time, without any repercussions. You are also within your right to withdraw the information you provide at any time.

What will be involved?

The research will involve you being invited to the University to meet myself; if you are unable to get to the University we will negotiate a mutually beneficial venue. I will ask you a series of questions that will be broadly based around the subjects discussed earlier. During the interview you will also be given the opportunity to discuss any areas about the Acute Illness course that has not been mentioned. The process sounds very formal however the interview will take a semi-structured form, so we will be able to discuss areas that you think are valuable. The interview will take approximately one hour

dependant on how much you would like to discuss.

How will the information be collected?

The interview will be tape-recorded. The discussions from the tapes will be word processed, these transcripts will be returned to you for accuracy of interpretation and at this point you will be able to change any details that you do not agree with. All tape recordings and data will be kept in a locked cupboard within the University and only my supervisor and I will have access to information that will be able to directly identify you.

Will any information I give be identifiable?

As you are aware the former students will also be invited to participate in the research. They will not be told anything that you say during your interview. This will also be applicable from your perspective you will not be informed of anything that they say during their interview. The finished report and analysis will be written up into a thesis. The information you provide maybe quoted, although all information that may lead to your identification will be removed and pseudonym will be used. The Acute Illness course is a new initiative there is a lot of interest in this development, therefore some papers may be submitted for publications and abstracts will be submitted conference presentations.

What if I have any concerns at any stage of the research?

If you would like any further information please contact myself on the details on the back of this leaflet

Will any of the information you give at interview be divulged?

All the interviews will be conducted under the professional code of conduct (NMC 2004).

What do I need to do now?

If you feel that you would like to be involved in the study please complete the attached consent form and return it in the stamped addressed envelope provided. I will then contact you at your indicted contact details to answer any questions that you may have and to negotiate a mutually suitable time to meet.

Researchers Details:

Joanne Garside
HW3/26
University of Huddersfield
Queensgate
Huddersfield
HD1 3DH

Tel: 01484 473567
Email: j.Garside@hud.ac.uk

Consent Form – Former Students



Please could you spend a few moments to complete the consent form? It is important that you read and understand the information sheet. If you require any further details please do not hesitate to contact me on the details on the supporting letter.

Please placing a tick in the yes box below

	Yes
I have been fully informed of the nature and aims of this research and consent to taking part	
I understand that I have the right to withdraw from the evaluation at any time without giving any reason, and a right to withdraw my data if I wish	
I understand that the interview tapes/notes and transcripts will be kept in secure conditions at the University of Huddersfield	
I understand that my identity will be protected by the use of pseudonym in the report and that no information that could lead to me being identified will be included in any report	
I give permission to be quoted (by use of pseudonym)	
I understand that no person other than the researcher and supervisor will have access to the 'raw' information that I provide	
I understand that my manager will also be invited to participate in the study	

Signature

Date

Print

Contact information

Address

Telephone

Email

Consent Form – Managers



Please could you spend a few moments to complete the consent form? It is important that you read and understand the information sheet. If you require any further details please do not hesitate to contact me on the details on the supporting letter.

Please placing a tick in the yes box below

	Yes
I have been fully informed of the nature and aims of this research and consent to taking part	
I understand that I have the right to withdraw from the evaluation at any time without giving any reason, and a right to withdraw my data if I wish	
I understand that the interview tapes/notes and transcripts will be kept in secure conditions at the University of Huddersfield	
I understand that my identity will be protected by the use of pseudonym in the report and that no information that could lead to me being identified will be included in any report	
I give permission to be quoted (by use of pseudonym)	
I understand that no person other than the researcher and supervisor will have access to the 'raw' information that I provide	

Signature

Date

Print

Contact information

Address

Telephone

Email

THE UNIVERSITY OF HUDDERSFIELD: RISK ANALYSIS & MANAGEMENT

ACTIVITY: Research Study – Developing optimal skills in acute care – an analytical case study of an acute illness course			Name: Joanne Garside	
LOCATION: University of Huddersfield			Date: June 2007	Review Date:
Hazard(s) identified	Details of Risk(s)	People at Risk	Risk management measures	Other comments
Heightened emotional awareness	Investigating participants past experiences may lead them to reflect or recall an upsetting issue	Participants	Supervision from qualified lecturer and registered nurse Access to independent counselling and support services if required	
Potential risk of highlighting poor practice	Investigating past experiences and practices may highlight practices that put the general public at risk	Participants	All the interviews will be conducted under the professional code of conduct (NMC 2004).	

Appendix 8
Interview guide

Interview Guide – Former Students

The interviews will be semi-structured; this approach will allow the individuals to focus on the subject in hand but will also allow them to raise any areas that they feel relevant, thus reporting and interpreting the subject through the eyes of the interviewees.

Welcome and Introduction

- If happy being taped
- Stop at any time
- Consent form
- Confidentiality
- Use of pseudonym

What sort of clinical area do you work in?

- How long have you worked there
- How long have you been qualified
- What is your role title (e.g. sister)

Why did you decide to do the acute illness course?

- What other studies have you done for your professional development
- Have you done it as part of your degree or the professional certificate

We used different teaching methods on the course. How did you find the:

- Group discussions and debates
- Problem based sessions
- Lectures
- Practical simulations scenarios

Encourage to discuss each individually and for rationale for explanation

How did you find the variety of assessment methods used on the course?

- Essay
- Portfolio development,
- Presentation
- Simulated practical clinical exam (OSCE)
- Choice

Encourage to discuss each individually and ask why

Did any of the teaching help with any areas of your practice?

Did any of the assessment help with any areas of your practice?

Particularly when caring for acutely ill patients do you think the Acute Illness course improved your:

- Knowledge
- Practical skills and competence

Encourage to discuss each individually and ask why

Has the Acute Illness course had any impact on your development in relation to the Agenda for Change - Knowledge and Skills Framework (KSF).

What policies are available in the clinical area that may relate to the acutely ill patient?

Is there anything else you would like to discuss in relation to the acute illness course?

Thank for your contribution – check contact address for return of transcripts

Interview Guide – Managers

The interviews will be semi-structured; this approach will allow the individuals to focus on the subject in hand but will also allow them to raise any areas that they feel relevant, thus reporting and interpreting the subject through the eyes of the interviewees.

Welcome and Introduction

- If happy being taped
- Stop at any time
- Confidentiality
- Use of pseudonym

What sort of clinical area do you work in?

- How long have you been the manager of *'the former student'*
- What is your role title (e.g. sister)

Why did you approve *'the former student'* to undertake the acute illness course?

Particularly when caring for acutely ill patients do you think the Acute Illness course improved *'the former students'*:

- Knowledge
- Practical skills and competence
- Encourage to discuss each individually and ask why

Has the variety of assessment methods used on the course been feedback to the clinical area?

- Essay
- Portfolio development,
- Presentation
- Simulated practical clinical exam (OSCE)
- Choice
- Encourage to discuss each individually and ask why

Did any of the assessment help with any areas of *'the former students'* practice?

Has the Acute Illness course had any impact on *'the former students'* development in relation to the Agenda for Change - Knowledge and Skills Framework (KSF).

Is there anything else you would like to discuss in relation to the Acute illness course?

Thank for your contribution – check contact address for return of transcripts

Appendix 9

Acute Illness Study - NVivo

File Edit View Go Project Tools Window Help

New [Icons]

Code At [Dropdown] ... In [Dropdown] ... [Icons]

Nodes

- Free Nodes
- Tree Nodes**
- Cases
- Relationships
- Matrices
- Search Folders
- All Nodes

Sources

Nodes

Sets

Queries

Models

Links

Classifications

Folders

Look for: [Dropdown] Search In: [Tree Nodes] Find Now Clear

Tree Nodes

Name	Sources	References
Assessment	4	5
Academic level	2	2
Achievement	1	5
Choice	8	16
Comfort zone	1	1
Essay	5	6
Portfolio	6	6
Practical exam	11	11
Practice related	7	16
Presentation	9	21
Clinical Backgroun	1	2
Acute Elderly	3	3
Clinical experience	7	11
Coronary Care Unit	3	6
ICU	1	1
Medical	2	2
Medical Assessment Unit	3	4
New jobs	3	3
Surgery	3	4
Theatre	1	1
Development	2	3
Academic development	3	3
Assessment used in practice	4	8
Confidence building	7	9

Acute Illness Study - NVivo

File Edit View Go Project Links Code Tools Window Help

New [Icons]

Code At [Dropdown] In [Dropdown]

Nodes

- Free Nodes
- Tree Nodes
- Cases
- Relationships
- Matrices
- Search Folders
- All Nodes

Sources

Nodes

Sets

Queries

Models

Links

Classifications

Folders

54 Items

Look for: [Dropdown] Search In [Dropdown] Tree Nodes Find Now Clear

Tree Nodes

Name	Sources	References
Comptence building	7	8
Confidence building	9	17
Practice development	13	27
Improvement to CPD	6	11
Improvements to Acute Illness course	7	12
The course	8	20
KSF	10	10
Managers perspective	2	4
Student development	3	6
Motives to do the course	11	18
Further studies	10	14
Multi disciplinary	1	1
Policies	6	7
Standards of Care	8	20
Acute care versus general wards	4	7
Bed pressues	1	1
Knowledge	1	1
Staffing levels	4	5
Them and us	2	4
Study leave	6	8
Staff development	4	8
Study/Work pressure	2	8

start NVivo

Appendix 10 Simulation scenario exemplar

Box Scenario

Clinical history and setting

Mr Stephens is 63 years old. He is admitted to your ward via his GP. He called his GP around for hours ago, complaining of central chest pain. His GP sent him direct to the emergency department (ED) who would like to admit to you. The ED nurse hands an electrocardiogram (ECG) to you, which she says is 'normal'. The nurse informs you that Mr Cole has angina. His only medication is a glyceryl trinitrate (GTN) spray, which he uses as required. He tries getting himself off the emergency department trolley, as he 'does not want to be a nuisance'. Mr Stephens wife, Sophia, is at work. The emergency department have tried to reach her, but have not been successful.

Clinical course

Mr Stephens looks pale and anxious. He informs you that the pain is much better than it was earlier. He tells you that the pain when he came to the emergency department was much worse than anything he had ever experienced. He would like a cup of tea as he has not had anything since he left home. He has a cannula inserted in the back of his right hand.

Initial assessment

A = Clear. Talking in full sentences. Oxygen mask removed in the emergency department

B = Respiratory rate 16bpm, Auscultation Bilateral air entry, Sa O₂ 97% FiO₂ 21%

C = Pulse 80bpm, regular (sinus rhythm if already monitored), blood pressure 148/90mm/Hg, ECG NAD

D = Conscious and alert, PERL, BM 6

E = Nil of note

Key points to observe

Prepare bed area appropriately	
Welcome Mr Stephens onto the ward	
Receive handover from emergency department nurse	
Attach monitor and analyse rhythm	
Initial observations	
Bleep appropriate support	
Psychological support	
Relatives contacted	

Clinical progression

One hour after settling on the ward, a first-year nursing student informs you that Mr Stephens is complaining of severe pain in his chest. When you arrive at the bed he is cold and clammy.

A = Clear

B = Respiratory rate 28bpm Auscultation some basal crackles, Sa O₂ 93% FiO₂ 21%

C = Heart rate 110bpm, sinus tachycardia, blood pressure 160/100mm/Hg, ECG ST Elevation II, III, AVF

D = Alert – complaining of severe central chest pain, PERL

E = Cold and clammy

Key points to observe:

Rapid assessment	
Reassurance/psychological support	
High-flow oxygen	
Fast bleep appropriate medical staff	
GTN spray	
Other analgesia (on arrival of medical staff - as prescribed)	
ECG – different from admission (shows acute inferior changes)	
Review blood results	
Safe transfer to critical care unit	
Other treatment options	
Information to relatives	
Discuss future management plans; possible PPCI	

Appendix 11

Transcripts of experiences of standards of care and alternative clinical placements

"More critically ill patients are now going to the general wards and that really scares me ... basically because I can see staffing levels on the ward are so rubbish and they will openly admit that and what worries me is that we are supposed to be doing these operations and it says clearly on the lists: needs HDU and needs this that and the other and someone has to decide no it's alright we can send them back to the wards. We know we are sending them back to the ward with no discussion so they have no chance to increase staffing or find someone to look after them and its ... I think more and more wards now dependant on who they are skilled in what they do but they are also getting more specialities back which is an added concern and I am not sure whether they have all the skills that they need to be looking after these sorts of patients and the time. Mmmm, I mean we have started doing extended stays in recovery for certain procedures ... so ... that started as one procedure it had to be done in the morning so we had plenty of staff round and the surgeons round so it was fine, but now its gone to we will do it whenever we like ... were quite protected because we usually have surgeons and anaesthetists around to call on but then we know we are sending them back to the wards ... a bit of a worry".

"One of the patients we went to see was a medical patient on a surgical ward and he was a surgical patient but he had medical issues and he was going between surgeons and medics ... managed best but the problem was his main problem was surgical so he was on a surgical ward, but the nurses were not knowledgeable of medical problems and on top of that they were ... they were quite reluctant their attitude was that they were not there problems so they were not interested in him – it was that kind of attitude even though there was basic things regardless of what ward he was on that should still be addressed. They were just very reluctant to get involved really there whole attitude was well his surgical scar is fine so from that point of view and yes I think in that sense it makes you see why outreach are so important and they are able to ask someone like the anaesthetist and things and get their point across sometimes a nurse can't really ring an anaesthetist and say will you come and see a patient but if you go via out reach they can do that and they can get the anaesthetist involved. I just think it is a brilliant link for nurses to have. Because it is not always possible to get a doctor and it is not always possible to get a doctor to listen to you when you can get hold of one and they don't always agree when you have a difference of opinion".

"We went to see a patient on the (specialist surgical) unit and it was agreed the day before that she needed a high dependency bed no two ways about it and we went the day after and she was still on the ward. They had done hourly observations overnight and hourly fluid balance and she (the outreach nurse) was absolutely shocked about ... she said (the nurse) "it doesn't matter" and it was documented in the notes by the medical staff and herself that this patients needed a HDU bed no matter that they were in this hospital or another hospital that if it had been identified, they had not got a leg to stand on really have they, it does get quite political doesn't it? but then you have to appreciate that there isn't enough money, enough beds and staff and working on the wards you realise that, but then it is a life at the end of the day so but also as well it is good to see them passing on skills to ward staff. I know when I used to work on the ward but never again".

Do you think there is a difference between surgical and medical areas?

"Definitely because surgical as much as they can go off and they may have medical problems but at that time they are treating that surgical problem and when they come

back from theatre they have a structure they have their obs and things where as medical, especially elderly they have loads of things that is wrong with them it is not just one thing.

Yes because we do get a lot of patients that do like have to go through spirometry they have to have an anaesthetist review before they even like attempt to go to surgery, so ... you do get a bit of it all but like we don't generally get the exacerbations because it is controlled at that time then or they will be on atenolol for their blood pressure, but then after surgery we do sometimes get them back to AF because they have missed their meds from being nil by mouth you know, so yes sometimes we do get a bit of both really, I think you definitely get your preference really".

"the outliers from all the other areas and they don't know how to deal with them properly and that is where the crutch of the problem is on these areas now, they don't know how to deal with respiratory patients, they are not giving them the right oxygen or enough oxygen, they are not using oxygen in the right way they are putting nebuliser's on with air and they are the patients with very low oxygen levels and are not getting any oxygen for that period of time... but they don't have the experience of that because nobody teaching them, and no one is teaching them that sort of thing and I think if you are putting patients on areas outside their specialty then they need to look at or someone needs to be there saying and teaching them how to deal with those sorts of things because they don't have those sorts of experiences and they don't have the people, its really difficult to pick up on it when you have got 10 patients coming in every day and going to theatre and phones constantly going and you are dealing with 4 different clinics every day sometimes it just.. and I think that's why critical illness falls down and you haven't the time and outreach will come and say do half hourly obs and when you have 16 patients and you are running 10 to theatre and back and you have got the phone constantly ringing and you have patients who are (very poorly) and you are trying to sort that out, half hourly obs is just not viable and I know they say the critically ill patients is the one you should be dealing with but if you have one person dealing with that one patient it all takes time and there is 3 of you on the ward the others are going to be critically ill by the end of that day because you are not doing what you should for them so it is really hard, I do feel sorry for the staff and I don't think they have the experience and the knowledge it makes them even less. You know when a patient is pyrexial you have got to do something about it if you have got the knowledge and the experience or if they have got breathing problems and you have got like the experience you watch the patients and you know what to do with them, but if you haven't you are on a hiding to nothing and it is a big issue I think and it is really tough and I don't know what the answer is. If someone said to me get loads of experienced staff get them in teach them and get someone there teaching them all the time I think it would be ideal but it is finding the money for someone just to teach all the time but they haven't got it anymore which is really tough".

Appendix 12
Practice placement module specification

1.	Module Code	HMN 1016
2.	MODULE TITLE	PROFESSIONAL PRACTICE (MASTERS)
3.	School (s) involved in delivery	School of Human & Health Sciences
4.	Name of Course	MSc Health Studies (Acute Nursing, Cardiology, Stroke)
5.	Module Leader	
6.	Location for Delivery	Queensgate Campus
7.	Module Type	Compulsory (acute nursing, stroke) Optional (cardiology)
8.	Credit Rating	15
9.	Level	Masters
10.	Learning Methods	Tutorials 10 hours Placement 30 hours Unsupervised 160 hours
11.	Pre-requisites	None
12.	Recommended Prior Study	Previous study at Honours level
13.	Co-requisites	Optional
14.	Professional Body Requirements	None
15.	Barred Combinations	None
16.	Graded or Non Graded	Graded

17. Synopsis

This module provides the student with the opportunity to support their theoretical studies with clinical placement experience. The student will spend a minimum of 30 hours or 5 days within an alternative placement, on a supernumerary basis, as negotiated with the module tutor. Individual development needs and learning outcomes will be negotiated prior to placement. Evidence of the agreed outcomes will be gathered and be presented during a Viva Voce. The student will meet regularly with their tutor to discuss and review the action plan and collection of evidence.

18. Outline Syllabus

No standard syllabus is required; the student will focus on their individual learning needs as identified within their action plan. The student will draw on knowledge gained from other University based modules and prior professional experience. Tutorial support will encourage informed criticism and a spirit of enquiry in the development and evidencing of skills and knowledge gained through practice.

19. Learning Outcomes

The criteria for successful completion of this module are that students will be able to:

Knowledge and Understanding Outcomes

1. Critically evaluate the effectiveness of aspects of clinical practice and the influencing health care policy
2. Critically analyse and evaluate research and evidence based practice in relation to the student's individual learning needs
3. Critically evaluate the role of the practitioner and their contribution to effective multi-disciplinary team working.

Ability Outcomes

4. Identify and critically justify individual learning requirements
5. Demonstrate individual practice development both within their own clinical setting and utilising alternative clinical placements

20. Assessment Strategy

20.1 *Formative Assessment*

This module will be assessed both formatively and summatively. Formative assessment will be as negotiated with the module leader.

20. Assessment Strategy

20.2 *Summative Assessment*

Assessment Tasks

The student will achieve the learning outcomes of this module in negotiation with the module leader.

Part One: Action Plan. Relates to outcome 4

Part Two: Viva Voce. Relates to outcomes 1-3 and 5

Assessment Criteria

The generic assessment criteria and the learning outcomes will apply.

The action plan will be negotiated with the module tutor

Identities of individuals and organisations should be anonymised (and) confidences respected. Consent should be obtained from individual patients/clients for use of any of their personal health information.

The expectation is that text based assessment tasks will be word processed. Students will be expected to have available an electronic copy of their work should this be required.

Assessment Weightings

Part One	20%
Part Two	80%

21. Learning Strategy

Tutorials and clinical placements.

Appendix 13 Generic honours level marking guide

	HONOURS
90 +	Outstanding demonstration of independent scholarly achievement. well structured assignment that comprehensively addresses the module learning outcomes and specific criteria critical evaluation is evident through systematic, relevant and comprehensive coverage of content skilfully communicated in a style appropriate to the assessment brief accurate and consistent use of a recognised referencing system wide range of current and seminal sources
80 +	Exceptional demonstration of independent scholarly achievement. well structured assignment that addresses the learning outcomes and specific criteria for the module critical evaluation is evident through systematic, relevant and comprehensive coverage of content skilfully communicated in a style appropriate to the assessment brief accurate and consistent use of a recognised referencing system wide range of current and seminal sources
70 +	Excellent demonstration of independent scholarly achievement. well structured assignment that addresses the learning outcomes and specific criteria for the module critical evaluation is evident through systematic and relevant coverage of content skilfully communicated in a style appropriate to the assessment brief accurate and predominately consistent use of a recognised referencing system wide range of appropriate sources
60 +	Very good demonstration of independent scholarly achievement. well structured assignment that addresses the learning outcomes and specific criteria for the module critical evaluation is evident through relevant coverage of content clearly communicated in a style appropriate to the assessment brief predominantly consistent and generally accurate use of a recognised referencing system good range of appropriate sources
50 +	Good demonstration of independent scholarly achievement. fairly well structured assignment that addresses the learning outcomes and specific criteria for the module some critical evaluation is evident through coverage of content good communication in a style appropriate to the assessment brief predominantly consistent and generally accurate use of a recognised referencing system a range of appropriate sources
40 +	Adequate demonstration of independent scholarly achievement. adequately structured assignment that addresses the learning outcomes and specific criteria for the module some critical evaluation is evident through coverage of content which is also descriptive communicates in a style appropriate to the assessment brief attempts to use a recognised referencing system but may have occasional systematic errors a limited selection of appropriate sources
30 +	Limited demonstration of independent scholarly achievement. poorly structured assignment that does not completely address the learning outcomes and specific criteria for the module work is descriptive in its coverage of the content Poor communication that does not use a style appropriate to the assessment brief use of recognised referencing system is systematically inaccurate throughout the document an insufficient range of appropriate sources
10 +	poorly structured assignment that does not address the learning outcomes and specific criteria for the module coverage of the content is inadequate or incomplete poor communication that does not use a style appropriate to the assessment brief recognised referencing system is not used sources are very limited or absent, or over reliance on one or two sources
0+	Poorly structured assignment that does not address the learning outcomes and specific criteria for the module

Appendix 14
Simulation assessment question and the marking guide
Marking Criteria (Example of Simulated Clinical Scenario)

Chest Pain 1

Date:	Candidate:
Assessor 1:	Assessor 2:

Clinical History and Setting:

Mr John Cole is a 57 year old gentleman who is admitted to your ward via Accident and Emergency. He arrived in A+E some 4 hours ago, complaining of central chest pain. The A+E Nurse hands you an ECG, which he/she says was done in A+E and is 'normal'.

The A+E Nurse also informs you that Mr Cole suffers from angina. Currently his only medication is a GTN spray which he uses as required. Mr Cole should ideally been admitted to CCU, but the Unit is extremely busy today. He tries getting himself off the A+E trolley as he 'does not want to be a nuisance'.

Mr Cole's wife, Louise is at work (Part time cleaning job). A+E have tried reaching her, but have not been successful.

Clinical Course

Mr Cole looks pale and anxious. He informs you that the pain is much better than it was earlier. He tells you that the pain when he came to A+E was much worse than anything he has ever experienced. He'd love a cup of tea as he has not had anything since he left home. He has a cannula inserted in the back of his right hand.

Initial Assessment, Care and Management

A = Clear. Talking in full sentences. Oxygen mask removed in A+E.

B = Resp. Rate 20 bpm.

C = Pulse 80bpm. Regular (Sinus Rhythm if already monitored). BP 148/90

D = Conscious and alert.

E = Nil of note

Airway ☐

Breathing ☐

Circulation ☐

Disability ☐

Exposure ☐

Conclusion expressed ☐

Bleep appropriate medical staff ☐

Comments:

Clinical Progression:

One hour after settling on the ward, a Student Nurse comes and informs you that Mr Cole is complaining of severe pain in his chest. When you arrive at the bed side he is cold and clammy.

A = Clear

B = Resp. rate 24bpm

C = Heart Rate 110bpm Sinus Tachycardia. BP 160/100

D = Alert – complaining of severe central chest pain.

E = Cold and clammy

- | | |
|---------------------------------|--------------------------|
| Airway | <input type="checkbox"/> |
| High flow oxygen | <input type="checkbox"/> |
| Breathing | <input type="checkbox"/> |
| Circulation | <input type="checkbox"/> |
| Attach Monitor | <input type="checkbox"/> |
| Obtain ECG | <input type="checkbox"/> |
| Bleep appropriate medical staff | <input type="checkbox"/> |
| Disability | <input type="checkbox"/> |
| Exposure | <input type="checkbox"/> |
| Conclusions | <input type="checkbox"/> |

Comments:

Overall Comments

- | | |
|---|--------|
| Appropriate Assessment of patient | Yes/No |
| Planning and Implementation of appropriate care | Yes/No |
| Evaluation | Yes/No |
| Maintained patient safety throughout | Yes/No |

If NO give reasons:

Pass ☐

Refer ☐

Fail ☐

Comments:

Signed:

Assessor 1:

Assessor 2: